JPMORGAN CHASE & CO Form 10-Q August 03, 2016

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q
Quarterly report pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934
For the quarterly period ended Commission file
June 30, 2016
number 1-5805

#### JPMorgan Chase & Co.

(Exact name of registrant as specified in its charter)

Delaware 13-2624428
(State or other jurisdiction of identification no.)

270 Park Avenue, New York, New York 10017 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (212) 270-6000

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

x Yes o No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

#### x Yes o No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer x Accelerated filer o

Non-accelerated filer (Do not check if a smaller reporting company) o Smaller reporting company o Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). o Yes x No

Number of shares of common stock outstanding as of June 30, 2016: 3,611,982,360

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_	Chase & Co ed financial )				Six months June 30,	s ended
millions, share, ratio, headcount data and where otherwise noted) Selected income statement data Total	1Q16	4Q15	3Q15	2Q15	2016	2015
\$24,380 revenue Total	\$23,239	\$22,885	\$22,780	\$23,812	\$47,619	\$47,878
indiffactions of the state of t	13,837	14,263	15,368	14,500	27,475	29,383
Pre-provisi 10,742 profit Provision	on 9,402	8,622	7,412	9,312	20,144	18,495
for 1.402 credit losses Income before	1,824	1,251	682	935	3,226	1,894
Endone tax expense	7,578	7,371	6,730	8,377	16,918	16,601
Income fax40 expense/(b	2,058 enefit)	1,937	(74)	2,087	5,198	4,397
Net \$6,200 income Earnings per	\$5,520	\$5,434	\$6,804	\$6,290	\$11,720	\$12,204

share data Net							
Shc5me: Basic	\$1.36	\$1.34	\$1.70	\$1.56	\$2.92	\$3.02	
<b>Dif</b> uted Average	1.35	1.32	1.68	1.54	2.89	2.99	
Shares Basic	3,669.9	3,674.2	3,694.4	3,707.8	3,652.9	3,716.6	
<b>3,666£</b> d Market	3,696.9	3,704.6	3,725.6	3,743.6	3,681.7	3,750.5	
and per							
common share							
data Market 224,449 capitalizati	216,547 on	241,899	224,438	250,581	224,449	250,581	
Common shares 3,612.0	2.656.7	2.662.5	2 (01 1	2 (00 1	2 (12 0	2 (00 1	
aı	3,656.7	3,663.5	3,681.1	3,698.1	3,612.0	3,698.1	
period-end Share price <sup>(a)</sup> :							
<b>\$16.6</b> 120	\$64.13	\$69.03	\$70.61	\$69.82	\$66.20	\$69.82	
£70.005 620s€	52.50 59.22	58.53 66.03	50.07 60.97	59.65 67.76	52.50 62.14	54.27 67.76	
Book							
yalue 62.67 per	61.28	60.46	59.67	58.49	62.67	58.49	
share Tangible book							
yalue 50.21 per	48.96	48.13	47.36	46.13	50.21	46.13	
share ("TBVPS" Cash	)						
dividends det8ared per	0.44	0.44	0.44	0.44	0.92	0.84	
share Selected ratios and metrics Return							
on  dommon % equity ("ROE")	69	%9	%12	%11	% 10	%11	%

Return						
on tangible 13 common	12	11	15	14	12	14
equity ("ROTCE" Return	<sup>(2)</sup>					
on 1.02 assets	0.93	0.90	1.11	1.01	0.97	0.97
("ROA") Overhead 56. ratio	60	62	67	61	58	61
Loans-to-d 66. ratio	eposits 64	65	64	61	66	61
High quality liquid						
\$5\$66s ("HQLA")	\$505	\$496	\$505	\$532	\$516	\$532
(in billions) <sup>(c)</sup> Common						
equity Tier						
12.0% ("CET1") capital	11.9 %	%11.8%	11.5	% 11.2 %	% 12.0	%11.2 %
ratio <sup>(d)</sup> Tier						
13.6 capital ratio <sup>(d)</sup>	13.5	13.5	13.3	12.8	13.6	12.8
Total dapatal ratio <sup>(d)</sup>	15.1	15.1	14.9	14.4	15.2	14.4
Tier						
8.5 leverage ratio <sup>(d)</sup> Selected	8.6	8.5	8.4	8.0	8.5	8.0
balance sheet data						
(period-end	d)					
Trading \$380,793 assets	\$366,153	\$343,839	\$361,708	\$377,870	\$380,793	\$377,870
<b>378</b> 160es <b>872</b> 1804	285,323 847,313	290,827 837,299	306,660 809,457	317,795 791,247	278,610 872,804	317,795 791,247
Core 775,813 loans	746,196	732,093	698,988	674,767	775,813	674,767
760,721	737,297	715,282	680,224	654,551	749,009	643,315

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Average						
core						
loans						
Total 2,466,096 assets	2,423,808	2,351,698	2,416,635	2,449,098	2,466,096	2,449,098
<b>D,830\$95</b> 8	1,321,816	1,279,715	1,273,106	1,287,332	1,330,958	1,287,332
Long-term 295,627 debt <sup>(e)</sup>	290,754	288,651	292,503	286,240	295,627	286,240
Common <b>2026/355</b> der	£224,089	221,505	219,660	216,287	226,355	216,287
equity Total	,	,	,	,	,	,
21502,141261de1	£250,157	247,573	245,728	241,205	252,423	241,205
equity <b>PHOADA</b> Gunt	237,420	234,598	235,678	237,459	240,046	237,459
Credit quality						
metrics						
Allowance						
for \$15,187 credit	\$15,008	\$14,341	\$14,201	\$14,535	\$15,187	\$14,535
losses						
Allowance						
for						
loan						
losses 1.64% to	1.66%	1.63%	1.67%	1.78%	1.64%	1.78%
total						
retained						
loans						
Allowance						
for loan						
losses						
to						
ile#Oned	1.40	1.37	1.40	1.45	1.40	1.45
loans						
excluding						
purchased						
credit-impa	ired					
loans(f)						
Nonperform \$7,757 assets	ning \$8,023	\$7,034	\$7,294	\$7,588	\$7,757	\$7,588
Net 1,181 charge-offs	1,110	1,064	963	1,007	2,291	2,059
Net	0.526	0.50%	0.40%	0.52%	0.546	0.55%
Olfo Ge-off	0.53%	0.52%	0.49%	0.53%	0.54%	0.55%
rate				_	_	_

Note: Effective January 1, 2016, the Firm adopted new accounting guidance related to (1) the recognition and measurement of debit valuation adjustments ("DVA") on financial liabilities where the fair value option has been elected, and (2) the accounting for employee stock-based incentive payments. For additional information, see

Accounting and Reporting Developments on pages 78–79 and Notes 3, 4, and 19.

- (a) Share prices shown for JPMorgan Chase's common stock are from the New York Stock Exchange.

  TBVPS and ROTCE are considered key financial performance measures. For further discussion of these measures,
- (b) see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Financial Performance Measures on pages 16–17.
- (c) HQLA represents the amount of assets that qualify for inclusion in the liquidity coverage ratio under the final U.S. rule ("U.S. LCR"). For additional information, see HQLA on page 70.
- Ratios presented are calculated under the Basel III Transitional capital rules and represent the Collins Floor. See Capital Management on pages 63–69 for additional information on Basel III.
- (e) Included unsecured long-term debt of \$220.6 billion, \$216.1 billion, \$211.8 billion, \$214.6 billion and \$209.1 billion at June 30, 2016, March 31, 2016, December 31, 2015, September 30, 2015 and June 30, 2015, respectively. Excluded the impact of residential real estate purchased credit-impaired ("PCI") loans, a non-GAAP financial
- (f) measure. For further discussion of these measures, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17. For further discussion, see Allowance for credit losses on pages 55–57.

#### INTRODUCTION

The following is management's discussion and analysis ("MD&A") of the financial condition and results of operations of JPMorgan Chase & Co. ("JPMorgan Chase" or the "Firm") for the second quarter of 2016.

This Form 10-Q should be read in conjunction with JPMorgan Chase's Annual Report on Form 10-K for the year ended December 31, 2015, filed with the U.S. Securities and Exchange Commission ("2015 Annual Report or 2015 Form 10-K"), to which reference is hereby made. See the Glossary of terms and acronyms on pages 169–176 for definitions of terms and acronyms used throughout this Form 10-Q.

The MD&A included in this Form 10-Q contains statements that are forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on the current beliefs and expectations of JPMorgan Chase's management and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the forward-looking statements. For a discussion of certain of those risks and uncertainties and the factors that could cause JPMorgan Chase's actual results to differ materially because of those risks and uncertainties, see Forward-looking Statements on page 80 of this Form 10-Q and Part I, Item 1A, Risk Factors, on pages 8–18 of JPMorgan Chase's 2015 Annual Report.

JPMorgan Chase & Co., a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the United States of America ("U.S."), with operations worldwide; the Firm had \$2.5 trillion in assets and \$252.4 billion in stockholders' equity as of June 30, 2016. The Firm is a leader in investment banking, financial

services for consumers and small businesses, commercial banking, financial transaction processing and asset management. Under the J.P. Morgan and Chase brands, the Firm serves millions of customers in the U.S. and many of the world's most prominent corporate, institutional and government clients.

JPMorgan Chase's principal bank subsidiaries are JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), a national banking association with U.S. branches in 23 states, and Chase Bank USA, National Association ("Chase Bank USA, N.A."), a national banking association that is the Firm's credit card-issuing bank. JPMorgan Chase's principal nonbank subsidiary is JPMorgan Securities LLC ("JPMorgan Securities"), the Firm's U.S. investment banking firm. The bank and nonbank subsidiaries of JPMorgan Chase operate nationally as well as through overseas branches and subsidiaries, representative offices and subsidiary foreign banks. One of the Firm's principal operating subsidiaries in the United Kingdom ("U.K.") is J.P. Morgan Securities plc, a subsidiary of JPMorgan Chase Bank, N.A.

For management reporting purposes, the Firm's activities are organized into four major reportable business segments, as well as a Corporate segment. The Firm's consumer business is the Consumer & Community Banking ("CCB") segment. The Firm's wholesale business segments are Corporate & Investment Bank ("CIB"), Commercial Banking ("CB"), and Asset Management ("AM"). For a description of the Firm's business segments, and the products and services they provide to their respective client bases, refer to Note 33 of JPMorgan Chase's 2015 Annual Report.

# EXECUTIVE OVERVIEW

This executive overview of the MD&A highlights selected information and may not contain all of the information that is important to readers of this Form 10-Q. For a complete description of the trends and uncertainties, as well as the risks and critical accounting estimates affecting the Firm and its various lines of business, this Form 10-Q should be read in its entirety.

Financial performance of JPMorgan Chase

(unaudited)	Three months ended June 30, Six months ended June 3							30				
As of or for the period ended,	Tillee lile	Timee months ended June 30,					Six months ended June 30,					
(in millions, except per share data and ratios)	2016		2015		Ch	ange	2016		2015		Cha	nge
Selected income statement data												
Total net revenue	\$24,380		\$23,812	2	2	%	\$47,619		\$47,878		(1)%	$\dot{o}$
Total noninterest expense	13,638		14,500		(6	)	27,475		29,383		(6	)
Pre-provision profit	10,742		9,312		15		20,144		18,495		9	
Provision for credit losses	1,402		935		50		3,226		1,894		70	
Net income	6,200		6,290		(1	)	11,720		12,204		(4	)
Diluted earnings per share	\$1.55		\$1.54		1	%	\$2.89		\$2.99		(3	)%
Return on common equity	10	%	11	%			10	%	11	%		
Capital ratios <sup>(a)</sup>												
CET1	12.0		11.2				12.0		11.2			
Tier 1 capital	13.6		12.8				13.6		12.8			

<sup>(</sup>a) Ratios presented are calculated under the transitional Basel III rules and represent the Collins Floor. See Capital Management on pages 63–69 for additional information on Basel III.

**Business Overview** 

JPMorgan Chase reported second-quarter 2016 net income of \$6.2 billion, or \$1.55 per share, on net revenue of \$24.4 billion. Net income was relatively flat compared with the second quarter of 2015. The Firm reported a ROE of 10% and a ROTCE of 13%.

Total net revenue was \$24.4 billion, up 2% compared with the prior year. Net interest income increased primarily driven by loan growth across businesses and the impact of higher rates, partially offset by lower investment securities balances. Noninterest revenue of \$13.0 billion was flat, with an increase in CIB Markets revenue offset by lower revenue in AM, lower CIB Investment Banking revenue and the impact of renegotiated Card co-brand partnership agreements.

Noninterest expense was \$13.6 billion, down 6% compared with the prior year, driven by a net legal benefit in the current quarter and continued expense reduction initiatives.

The provision for credit losses was \$1.4 billion, up from \$935 million, reflecting an increase in the allowance for credit losses in the current quarter versus decreases in the allowance for credit losses in the prior-year quarter. The current quarter reflected higher net charge-offs in wholesale, primarily driven by the Oil & Gas and Metals & Mining portfolios.

The total allowance for credit losses was \$15.2 billion at June 30, 2016. At the end of the second quarter of 2016, the Firm had a loan loss coverage ratio, excluding the PCI portfolio, of 1.40%, compared with 1.45% in the prior-year quarter. The Firm's allowance for loan losses to retained nonaccrual loans, excluding the PCI and credit card portfolios, was 110%, compared with 109% in the prior-year quarter. The Firm's nonperforming assets totaled \$7.8

billion, down from the prior-quarter level of \$8.0 billion and up from the prior-year level of \$7.6 billion. Firmwide average core loans increased 16% compared with the prior-year quarter and 3% compared with the first quarter of 2016. Within CCB, average core loans were up 23% over the prior-year quarter. CCB had record growth in average deposits, up \$54 billion, or 10%, over the prior-year quarter. Credit card sales volume was up 8% and merchant processing volume was up 13% from the prior-year quarter. CCB had nearly 25 million active mobile customers in the second quarter of 2016, up 18% over the prior-year quarter.

CIB maintained its #1 ranking for Global Investment Banking fees with a 7.9% wallet share for the second quarter of 2016. Within CB, average loans were up 13% from the prior-year quarter. AM had record average loans, up 4% over the prior-year quarter and 81% of AM's mutual fund assets under management ranked in the 1st or 2nd quartiles over the past 5 years.

For a detailed discussion of results by line of business, refer to the Business Segment Results on pages 18–39. The Firm maintained its fortress balance sheet and added to its capital, ending the second quarter of 2016 with a TBVPS of \$50.21, up 9% over the prior-year quarter. The Firm's estimated Basel III Advanced Fully Phased-In CET1 capital and ratio were \$179 billion and 11.9%, respectively. The Fully Phased-In supplementary leverage ratio ("SLR") for the Firm and for JPMorgan Chase Bank, N.A. was each 6.6% at June 30, 2016. The Firm also was compliant with the Fully Phased-In U.S. LCR and had \$516 billion of HQLA as of June 30, 2016. For further discussion of the liquidity coverage ratio ("LCR") and HQLA, see Liquidity Risk Management on pages 70–74.

Key performance measures: ROTCE and TBVPS are considered key financial performance measures. Each of the Fully Phased-In capital and leverage measures is considered a key regulatory capital measure.

For further discussion of Basel III Advanced Fully Phased-In measures and the SLR under the U.S. final SLR rule, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17, and Capital Management on pages 63–69.

JPMorgan Chase continues to support consumers, businesses and communities around the globe. The Firm provided credit and raised capital of \$1.2 trillion for commercial and consumer clients during the first six months of 2016. This included providing \$369 billion of credit to corporations, \$123 billion to consumers, and \$12 billion to U.S. small businesses. During the first six months of 2016, the Firm also raised \$599 billion of capital for corporate clients and non-U.S. government entities and provided credit and raised capital of \$47 billion for nonprofit and U.S. government entities, including U.S. states, municipalities, hospitals and universities.

Regulatory and business developments

In March 2016, the Basel Committee proposed revisions to the operational and credit risk capital frameworks of Basel III and in April 2016, proposed a recalibration of the leverage ratio, changes to the definition of defaulted assets and finalized the treatment of interest rate risk in the banking book. As these proposals are finalized by the Basel Committee, U.S. banking regulators will propose requirements applicable to U.S. financial institutions. In March 2016, the Federal Reserve Board released a revised proposal to establish single-counterparty credit limits for large U.S. bank holding companies and foreign banking organizations. The Firm continues to assess the impacts as the proposed rules are finalized and will make appropriate adjustments to its businesses in response to these and other ongoing developments in regulatory requirements.

On April 6, 2016, the U.S. Department of Labor ("DOL") issued its final "fiduciary" rule. The rule will deem many of the investment, rollover and asset management recommendations from broker-dealers, banks and other financial institutions to clients regarding their individual retirement accounts and other retirement accounts fiduciary "investment advice" under the Employee Retirement Income Security Act of 1974 ("ERISA"), as amended. Among the most significant impacts of the rule and related prohibited transaction exemptions will be the impact on the fee and compensation practices at financial institutions and on certain fee and revenue sharing arrangements among funds, fund sponsors and the financial institutions that offer investment advice to retail retirement clients. The related exemptions may require new client contracts, adherence to "impartial conduct" standards (including a requirement to act in the "best interest" of retirement clients) the adoption of related policies and procedures, as well as website and other disclosures to both investors and the DOL. The Firm believes it will be able to

conform its business practices to meet the requirements of the new rule and exemptions within the prescribed time periods.

On April 13, 2016, the Federal Deposit Insurance Corporation ("FDIC") and the Board of Governors of the Federal Reserve System (the "Federal Reserve") jointly announced determinations and provided firm-specific feedback on the 2015 resolution plans of eight systemically important domestic banking institutions, including the Firm. The FDIC and the Federal Reserve jointly determined that the 2015 resolution plan of the Firm, along with the 2015 resolution plans of four other U.S. banking institutions, was not credible or would not facilitate an orderly resolution under the U.S. Bankruptcy Code, as provided under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), because the plan contained certain deficiencies identified by the two agencies. If the Firm does not adequately remediate the identified deficiencies in its plan by October 1, 2016, the FDIC and the Federal Reserve may impose more stringent prudential requirements on the Firm, including more stringent capital, leverage, or liquidity requirements, as well as restrictions on the growth, activities, or operations of the Firm, or its subsidiaries. The FDIC and the Federal Reserve also identified certain shortcomings in the Firm's 2015 resolution plan which must be satisfactorily addressed in the Firm's resolution plan due on July 1, 2017. The Firm is committed to meeting the regulators' expectations and fully remediating the identified deficiencies and shortcomings within the prescribed deadlines.

On June 23, 2016, the U.K. conducted a referendum and voted to leave the European Union. Many international banks, including the Firm, operate substantial parts of their European Union business from entities based in the U.K. Upon the U.K. leaving the European Union, the regulatory and legal environment that would then exist, and to which

the Firm's U.K. operations would then be subject, will depend on, in certain respects, the nature of the arrangements agreed with the European Union and other trading partners.

These arrangements cannot be predicted, but currently the Firm does not believe any of the likely identified scenarios would threaten the viability of the Firm's business units or the Firm's ability to serve clients across the European Union and in the U.K. However, it is possible that under some scenarios, changes to the Firm's legal entity structure and operations would be required, which might result in a less efficient operating model across the Firm's European legal entities.

On June 29, 2016, the Federal Reserve informed the Firm that it did not object, on either a quantitative or qualitative basis, to the Firm's 2016 capital plan, submitted under the Comprehensive Capital Analysis and Review ("CCAR"). For additional information see Capital Management on pages 63–69.

#### 2016 Business outlook

These current expectations are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Such forward-looking statements are based on the current beliefs and expectations of JPMorgan Chase's management and are subject to significant risks and uncertainties. These risks and uncertainties could cause the Firm's actual results to differ materially from those set forth in such forward-looking statements. See Forward-Looking Statements on page 80 of this Form 10-Q and Risk Factors on pages 8–18 of JPMorgan Chase's 2015 Annual Report. There is no assurance that actual results for the full year of 2016 will be in line with the outlook set forth below, and the Firm does not undertake to update any of these forward-looking statements to reflect the impact of circumstances or events that arise after the date hereof.

JPMorgan Chase's outlook for the remainder of 2016 should be viewed against the backdrop of the global and U.S. economies, financial markets activity, the geopolitical environment, the competitive environment, client activity levels, and regulatory and legislative developments in the U.S. and other countries where the Firm does business. Each of these interrelated factors will affect the performance of the Firm and its lines of business. The Firm expects it will continue to make appropriate adjustments to its businesses and operations in response to ongoing developments in the legal and regulatory, as well as business and economic, environment in which it operates.

Assuming there are no changes in interest rates during the remainder of 2016, management expects full-year 2016 net interest income could be over \$2 billion higher compared to 2015 levels, reflecting the Federal Reserve's rate increase in December 2015 and anticipated loan growth.

Management also expects managed noninterest revenue of approximately \$50 billion in 2016, although actual results will depend on market conditions. The anticipated decline from 2015 levels is expected to be driven primarily by lower Card revenue, reflecting renegotiated co-brand partnership agreements, lower Investment Banking fees and lower Asset Management revenue.

Management expects core loan growth of approximately 10%-15% in 2016 as well as continued growth in consumer deposits; as a result of these two factors, the Firm's average balance sheet is anticipated to reach approximately \$2.45 trillion in 2016.

The Firm continues to experience charge-offs at levels lower than its through-the-cycle expectations reflecting favorable credit trends across the consumer and wholesale portfolios (excluding the Oil & Gas and Metals & Mining portfolios). Management expects total net charge-offs of up to approximately \$4.75 billion in 2016, with the increase from 2015 levels driven by loan growth as well as higher charge-offs in the Oil & Gas portfolio.

The Firm continues to take a disciplined approach to managing its expenses, while investing in growth and innovation. The Firm intends to leverage its scale and improve its operating efficiencies, in order to reinvest its expense savings in additional technology and marketing investments and fund other growth initiatives. As a result, Firmwide adjusted expense in 2016 is expected to be approximately \$56 billion (excluding Firmwide legal expense).

#### CONSOLIDATED RESULTS OF OPERATIONS

This section provides a comparative discussion of JPMorgan Chase's Consolidated Results of Operations on a reported basis for the three and six months ended June 30, 2016 and 2015, unless otherwise specified. Factors that relate primarily to a single business segment are discussed in more detail within that business segment. For a discussion of the Critical Accounting Estimates Used by the Firm that affect the Consolidated Results of Operations, see pages 76–77 of this Form 10-Q and pages 165–169 of JPMorgan Chase's 2015 Annual Report.

Revenue

	Three me	onths end	ed June	Six months ended June			30,
(in millions)	2016	2015	Change	2016	2015	Cha	nge
Investment banking fees	\$1,644	\$1,833	(10)%	\$2,977	\$3,627	(18	)%
Principal transactions	2,976	2,834	5	5,655	6,489	(13	)
Lending- and deposit-related fees	1,403	1,418	(1)	2,806	2,781	1	
Asset management, administration and commissions	3,681	4,015	(8)	7,305	7,822	(7	)
Securities gains	21	44	(52)	72	96	(25	)
Mortgage fees and related income	689	783	(12)	1,356	1,488	(9	)
Card income	1,358	1,615	(16)	2,659	3,046	(13	)
Other income <sup>(a)</sup>	1,261	586	115	2,062	1,168	77	
Noninterest revenue	13,033	13,128	(1)	24,892	26,517	(6	)
Net interest income	11,347	10,684	6	22,727	21,361	6	
Total net revenue	\$24,380	\$23,812	2%	\$47,619	\$47,878	(1)%	,

Included operating lease income of \$651 million and \$504 million for the three months ended June 30, 2016 and (a) 2015, respectively, and \$1.3 billion and \$973 million for the six months ended June 30, 2016 and 2015, respectively.

#### Quarterly results

Total net revenue was up by 2% primarily reflecting higher net interest income. Noninterest revenue was flat, with the increase in Markets revenue in CIB and higher other income, which included a gain in CCB on the sale of Visa Europe interests offset by lower revenue in AM, lower CIB Investment Banking revenue and the impact of renegotiated Card co-brand partnership agreements.

Investment banking fees decreased predominantly driven by lower equity underwriting fees compared to a strong quarter in the prior year, reflecting lower industry-wide fee levels. For additional information on investment banking fees, see CIB segment results on pages 25–29, CB segment results on pages 30–33 and Note 6.

Principal transactions revenue increased largely reflecting higher Fixed Income Markets revenue in CIB as a result of strong performance in Rates and Currencies & Emerging Markets on higher client flows driven by increased issuance-related activity, improved global emerging market sentiment and increased volumes in foreign exchange markets. Performance in Credit Products also improved as client risk appetite recovered in a less volatile environment driving higher primary and secondary market activity. The increase was partially offset by a net reduction in Credit Adjustments & Other in CIB, and fair value losses on the investment in Square in CCB. For additional information on principal transactions revenue, see CIB segment results on pages 25–29 and Note 6.

Lending- and deposit-related fees were flat. For information on lending- and deposit-related fees, see the segment results for CCB on pages 19–24, CIB on pages 25–29, and CB on pages 30–33.

Asset management, administration and commissions revenue decreased largely reflecting the impact of weaker markets (including generally lower average equity market values compared with the prior year), lower performance fees and lower brokerage activity, particularly in AM. For additional information on these fees and commissions, see the segment discussions of CCB on pages 19–24, AM on pages 34–37, and Note 6.

Mortgage fees and related income decreased due to lower servicing revenue, largely as a result of a lower level of third-party loans serviced, partially offset by higher net production revenue. For further information on mortgage fees and related income, see the segment discussion of CCB on pages 19–24 and Note 16.

Card income decreased due to the impact of renegotiated co-brand partnership agreements and higher amortization of new account origination costs. For further information, see CCB segment results on pages 19–24.

Other income increased predominantly reflecting a gain on the sale of Visa Europe interests and higher operating lease income reflecting growth in auto operating leased assets, both in CCB.

Net interest income increased primarily driven by loan growth across businesses and the impact of higher rates, partially offset by lower investment securities balances and higher interest expense on long-term debt primarily associated with hedging activity. The Firm's average interest-earning assets and net interest yield, on a fully taxable equivalent ("FTE") basis, were \$2.1 trillion and 2.25% (an increase of 16 basis points), respectively.

#### Year-to-date results

Total net revenue was flat, with the decrease in noninterest revenue offset by the increase in net interest income. The decrease in noninterest revenue was primarily driven by lower revenue in CIB and AM, and the impact of renegotiated Card co-brand partnership agreements, partially offset by higher other income, which included a gain in CCB on the sale of Visa Europe interests.

Investment banking fees decreased driven by lower equity and debt underwriting fees reflecting a decline in industry-wide fee levels. Debt underwriting fees were also impacted by fewer large acquisition finance deals. Principal transactions revenue decreased largely reflecting the following in CIB: a net reduction in Credit Adjustments & Other on widening credit spreads, and lower Equity Markets revenue compared with a strong prior year, particularly in Asia.

Lending- and deposit-related fees were flat. For information on lending- and deposit-related fees, see the segment results for CCB on pages 19–24, CIB on pages 25–29, and CB on pages 30–33.

Asset management, administration and commissions revenue decreased largely reflecting the impact of the challenging market environment, particularly in AM.

Mortgage fees and related income decreased due to lower servicing revenue, largely as a result of a lower level of third-party loans serviced, and lower net production revenue, largely offset by higher mortgage servicing rights ("MSR") risk management results.

Card income decreased due to the impact of renegotiated co-brand partnership agreements and higher amortization of new account origination costs, partially offset by higher card sales volume. For further information, see CCB segment results on pages 19–24.

Other income increased predominantly reflecting a gain on the sale of Visa Europe interests in CCB, a gain on sale of an asset in AM, higher operating lease income reflecting growth in auto operating leased assets in CCB, and the impact of a loss recorded in the prior year related to the accelerated amortization of cash flow hedges associated with the exit of certain non-operating deposits.

Net interest income increased primarily driven by loan growth across businesses and the impact of higher rates, partially offset by lower investment securities balances and higher interest expense on long-term debt primarily associated with hedging activity. The Firm's average interest-earning assets and net interest yield, on a FTE basis, were \$2.1 trillion and 2.28% (an increase of 20 basis points), respectively.

#### Provision for credit losses

	Three n		ended	Six months ended June			
	June 30	,		30,			
(in millions)	2016	2015	Change	2016	2015	Chai	nge
Consumer, excluding credit card	\$95	\$(98)	NM	\$316	\$44	NM	
Credit card	1,110	800	39 %	1,940	1,589	22	%
Total consumer	1,205	702	72 %	2,256	1,633	38	%
Wholesale	197	233	(15)%	970	261	272	%
Total provision for credit losses	\$1,402	\$935	50 %	\$3,226	\$1,894	70	%
Quarterly results							

The provision for credit losses increased due to additions to the allowance for credit losses compared with reductions in the prior year, and higher net charge-offs. The Consumer provision reflected an increase in the allowance for credit losses primarily driven by higher loss rates in newer credit card vintages, as well as growth in the credit card and auto loan portfolios, partially offset by reductions in the allowance due to continued improvement in home prices and delinquencies in the residential real estate portfolio, as well as runoff in the student loan portfolio. The Wholesale provision reflected higher net charge-offs primarily driven by Oil & Gas and Metals & Mining and a net addition to the allowance for credit losses of approximately \$50 million; the allowance reflected an increase of approximately \$200 million, driven by a single Oil & Gas name in the CIB, which was largely offset by releases in the allowance across the remainder of the portfolio.

For a more detailed discussion of the credit portfolio and the allowance for credit losses, see the segment discussions of CCB on pages 19–24, CIB on pages 25–29, CB on pages 30–33, and the Allowance for credit losses on pages 55–57. Year-to-date results

The provision for credit losses increased due to additions to the allowance for credit losses compared with reductions in the prior year, and higher net charge-offs. The Consumer provision reflected an increase in the allowance for credit losses primarily driven by higher loss rates in newer credit card vintages, as well as growth in the credit card and auto loan portfolios, partially offset by reductions in the allowance due to continued improvement in home prices and delinquencies in the residential real estate portfolio, as well as runoff in the student loan portfolio. The Wholesale provision reflected higher net charge-offs primarily driven by Oil & Gas and Metals & Mining and an addition to the allowance for credit losses of approximately \$750 million, reflecting an increase of approximately \$700 million related to the Oil & Gas and Natural Gas Pipelines portfolios.

#### Noninterest expense

	Three me	onths end	ed June	Six months ended June		
	30,			30,		
(in millions)	2016	2015	Chang	e 2016	2015	Change
Compensation expense	\$7,778	\$7,694	1 %	\$15,438	\$15,737	(2)%
Noncompensation expense:						
Occupancy	899	923	(3)	1,782	1,856	(4)
Technology, communications and equipment	1,665	1,499	11	3,283	2,990	10
Professional and outside services	1,700	1,768	(4)	3,248	3,402	(5)
Marketing	672	642	5	1,375	1,233	12
Other expense <sup>(a)(b)</sup>	924	1,974	(53)	2,349	4,165	(44)
Total noncompensation expense	5,860	6,806	(14)	12,037	13,646	(12)
Total noninterest expense	\$13,638	\$14,500	(6)%	\$27,475	\$29,383	(6)%

Included firmwide legal expense of \$(430) million and \$291 million for the three months ended June 30, 2016 and (a) 2015, respectively, and \$(476) million and \$978 million for the six months ended June 30, 2016 and 2015, respectively

Included FDIC-related expense of \$283 million and \$300 million for the three months ended June 30, 2016 and (b) 2015, respectively, and \$552 million and \$618 million for the six months ended June 30, 2016 and 2015, respectively.

#### Quarterly results

Total noninterest expense decreased by 6% driven by a net legal benefit in the current quarter compared with a legal expense in the prior year, and the impact of continued expense reduction initiatives.

Compensation expense increased predominantly driven by higher performance-based compensation expense in CIB, partially offset by the impact of continued expense reduction initiatives, including lower headcount in certain businesses (offset by higher headcount in Corporate).

Noncompensation expense decreased as a result of a net legal benefit in the current quarter (compared with a legal expense in the prior year), and lower professional services expense, including lower legal services expense; the prior year included a loss on an asset held for sale in AM. These factors were partially offset by higher depreciation expense reflecting growth in auto operating leased assets in CCB. For a further discussion of legal matters, see Note 23.

#### Year-to-date results

Total noninterest expense decreased by 6% driven by a net legal benefit in the current year compared with a legal expense in the prior year, lower performance-based compensation expense, and the impact of continued expense reduction initiatives, partially offset by incremental investments and growth in the businesses.

Compensation expense decreased predominantly driven by lower performance-based compensation expense in CIB and AM, and the impact of continued expense reduction initiatives, including lower headcount in certain businesses (offset by higher headcount in Corporate).

Noncompensation expense decreased as a result of a net legal benefit in the current year (compared with a legal expense in the prior year); lower professional services expense, including lower legal services and contractors; lower regulatory-related expense; and the impact of the disposal of assets recorded in AM, partially offset by higher depreciation expense from growth in auto operating leased assets and higher investments in marketing, both in CCB; and the impact of a benefit recorded in the prior year from a franchise tax settlement. For a further discussion of legal matters, see Note 23.

#### Income tax expense

	Three mo	nths ended	June	Six months ended June 30,			
(in millions, except rate)	30,			SIX IIIOIIIIIS	s ended June	30,	
- -	2016	2015	Change	2016	2015	Change	
Income before income tax expense	\$9,340	\$8,377	11 %	\$16,918	\$16,601	2 %	
Income tax expense	3,140	2,087	50	5,198	4,397	18	
Effective tax rate	33.6 %	24.9 %		30.7 %	26.5 %		
Quarterly results							

The effective tax rate increased due to higher income tax expense in the current period from tax audits, compared with higher income tax benefits in the prior year from tax audits. The increase was partially offset by changes in the mix of income and expense subject to U.S. federal and state and local taxes.

#### Year-to-date results

The effective tax rate increased due to higher income tax expense in the current period from tax audits, compared with higher income tax benefits in the prior year from tax audits. The increase was partially offset by tax benefits from the adoption of new accounting guidance related to employee stock-based incentive payments, and changes in the mix of income and expense subject to U.S. federal and state and local taxes. For additional details on the impact of the new accounting guidance, see Accounting and Reporting Developments on pages 78–79.

**CONSOLIDATED** 

**BALANCE** 

**SHEETS** 

**ANALYSIS** 

Consolidated balance sheets overview

The following is a discussion of the significant changes between June 30, 2016, and December 31, 2015.

Selected Consolidated balance sheets data

(in millions)	Jun 30, 2016	Dec 31, 2015	Change
Assets			
Cash and due from banks	\$19,710	\$20,490	(4)%
Deposits with banks	345,595	340,015	2
Federal funds sold and securities purchased under resale agreements	237,267	212,575	12
Securities borrowed	103,225	98,721	5
Trading assets:			
Debt and equity instruments	302,347	284,162	6
Derivative receivables	78,446	59,677	31
Securities	278,610	290,827	(4)
Loans	872,804	837,299	4
Allowance for loan losses	(14,227	(13,555)	)5
Loans, net of allowance for loan losses	858,577	823,744	4
Accrued interest and accounts receivable	64,911	46,605	39
Premises and equipment	14,262	14,362	(1)
Goodwill	47,303	47,325	_
Mortgage servicing rights	5,072	6,608	(23)
Other intangible assets	917	1,015	(10)
Other assets	109,854	105,572	4
Total assets	\$2,466,096	\$2,351,698	5

Federal funds sold and securities purchased under resale agreements

The increase was due to higher demand for securities to cover short positions related to client-driven market-making activities in CIB, and the deployment of excess cash by Treasury. For additional information on the Firm's Liquidity Risk Management, see pages 70–74.

Trading assets and liabilities-debt and equity instruments

The increase in trading assets and liabilities was predominantly related to client-driven market-making activities in CIB. The increase in trading assets reflected higher debt instruments, partially offset by lower equity instruments. The increase in trading liabilities reflected higher levels of short positions in debt and equity instruments. For additional information, refer to Note 3.

Trading assets and liabilities–derivative receivables and payables

The increase in derivative receivables and payables was predominantly related to client-driven market-making activities in CIB, which resulted in higher interest rate and foreign exchange derivative receivables and payables, driven by market movements. For additional information, refer to Derivative contracts on pages 53–54, and Notes 3 and 5.

#### Securities

The decrease was predominantly due to net sales, maturities and paydowns in corporate debt securities and non-U.S. residential mortgage-backed securities reflecting a shift to loans. For additional information, see Notes 3 and 11.

#### Loans and allowance for loan losses

The increase in loans was driven by higher wholesale and consumer loans. The increase in wholesale loans was driven by strong originations of commercial and industrial loans in CB and CIB, and commercial real estate loans in CB. The

increase in consumer loans reflects retention of originated high-quality prime mortgages and growth in auto loans. The increase in the allowance for loan losses was attributable to additions to both the wholesale and consumer allowances. The increase in the wholesale allowance reflects downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios. The increase in the consumer allowance was primarily driven by higher loss rates in newer credit card vintages, as well as growth in the credit card and auto loan portfolios, partially offset by reductions in the allowance due to continued improvement in home prices and delinquencies in the residential real estate portfolio, as well as runoff in the student loan portfolio. For a more detailed discussion of loans and the allowance for loan losses, refer to Credit Risk Management on pages 41–57, and Notes 3, 4, 13 and 14.

Accrued interest and accounts receivable

The increase was driven by higher client receivables related to client-driven market-making activities in CIB. Mortgage servicing rights

For additional information on MSRs, see Note 16.

#### Selected Consolidated balance sheets data (continued)

(in millions)	Jun 30, 2016	Dec 31, 2015	Cha	ange
Liabilities				
Deposits	\$1,330,958	\$1,279,713	54	
Federal funds purchased and securities loaned or sold under repurchase agreements	166,044	152,678	9	
Commercial paper	17,279	15,562	11	
Other borrowed funds	19,945	21,105	(5	)
Trading liabilities:				
Debt and equity instruments	101,194	74,107	37	
Derivative payables	57,764	52,790	9	
Accounts payable and other liabilities	184,635	177,638	4	
Beneficial interests issued by consolidated variable interest entities ("VIEs")	40,227	41,879	(4	)
Long-term debt	295,627	288,651	2	
Total liabilities	2,213,673	2,104,125	5	
Stockholders' equity	252,423	247,573	2	
Total liabilities and stockholders' equity	\$2,466,096	\$2,351,698	35	%
Danceite				

The increase was attributable to higher consumer and wholesale deposits. The increase in consumer deposits was due to continued growth from new and existing customers, as well as the impact of low attrition rates. The increase in wholesale deposits was mainly driven by growth in client activity in CIB's Treasury Services business. For more information on deposits, refer to the Liquidity Risk Management discussion on pages 70–74; and Notes 3 and 17.

Federal funds purchased and securities loaned or sold under repurchase agreements

The increase was due to higher secured financing of investment securities in the Chief Investment Office ("CIO"), and higher client-driven market-making activities in CIB. For additional information on the Firm's Liquidity Risk Management, see pages 70–74.

Stockholders' equity

The increase was due to net income and higher accumulated other comprehensive income ("AOCI"), partially offset by cash dividends on common and preferred stock and repurchases of common stock. For additional information on changes in stockholders' equity, see page 84, and on the Firm's capital actions, see Capital actions on page 68.

#### OFF-BALANCE SHEET

#### **ARRANGEMENTS**

In the normal course of business, the Firm enters into various contractual obligations that may require future cash payments. Certain obligations are recognized on-balance sheet, while others are off-balance sheet under accounting principles generally accepted in the U.S. ("U.S. GAAP"). The Firm is involved with several types of off-balance sheet arrangements, including through nonconsolidated special-purpose entities ("SPEs"), which are a type of VIE, and through lending-related financial instruments (e.g., commitments and guarantees). For further discussion, see Note 21 of this Form 10-Q and Off-Balance Sheet Arrangements and Contractual Cash Obligations on pages 77–78 and Note 29 of JPMorgan Chase's 2015 Annual Report.

#### Special-purpose entities

The most common type of VIE is an SPE. SPEs are commonly used in securitization transactions in order to isolate certain assets and distribute the cash flows from those assets to investors. SPEs are an important part of the financial markets, including the mortgage- and asset-backed securities and commercial paper markets, as they provide market liquidity by facilitating investors' access to specific portfolios of assets and risks. The Firm holds capital, as deemed appropriate, against all SPE-related transactions and related exposures, such as derivative transactions and lending-related commitments and guarantees. For further information on the types of SPEs, see Note 15 of this Form 10-Q, and Note 1 and Note 16 of JPMorgan Chase's 2015 Annual Report.

Implications of a credit rating downgrade to JPMorgan Chase Bank, N.A.

For certain liquidity commitments to SPEs, JPMorgan Chase Bank, N.A., could be required to provide funding if its short-term credit rating were downgraded below specific levels, primarily "P-1," "A-1" and "F1" for Moody's Investor Service ("Moody's"), Standard & Poor's and Fitch, respectively. These liquidity commitments support the issuance of asset-backed commercial paper by Firm-administered consolidated SPEs. In the event of a short-term credit rating downgrade, JPMorgan Chase Bank, N.A., absent other solutions, would be required to provide funding to the SPE if the commercial paper could not be reissued as it matured. The aggregate amounts of

commercial paper outstanding held by third parties as of June 30, 2016, and December 31, 2015, was \$5.4 billion and \$8.7 billion, respectively. The aggregate amounts of commercial paper issued by these SPEs could increase in future periods should clients of the Firm-administered consolidated SPEs draw down on certain unfunded lending-related commitments. These unfunded lending-related commitments were \$9.0 billion and \$5.6 billion at June 30, 2016, and December 31, 2015, respectively. The Firm could facilitate the refinancing of some of the clients' assets in order to reduce the funding obligation. For further information, see the discussion of Firm-administered multiseller conduits in Note 15.

The Firm also acts as liquidity provider for certain municipal bond vehicles. The Firm's obligation to perform as liquidity provider is conditional and is limited by certain termination events, which include bankruptcy or failure to pay by the municipal bond issuer and any credit enhancement provider, an event of taxability on the municipal bonds or the immediate downgrade of the municipal bond to below investment grade. See Note 15 for additional information.

Off-balance sheet lending-related financial instruments, guarantees, and other commitments

JPMorgan Chase provides lending-related financial instruments (e.g., commitments and guarantees) to meet the financing needs of its customers. The contractual amount of these financial instruments represents the maximum possible credit risk to the Firm should the counterparty draw upon the commitment or the Firm be required to fulfill its obligation under the guarantee, and should the counterparty subsequently fail to perform according to the terms of the contract. Most of these commitments and guarantees expire without being drawn or a default occurring. As a result, the total contractual amount of these instruments is not, in the Firm's view, representative of its actual future credit exposure or funding requirements. For further discussion of lending-related financial instruments, guarantees and other commitments, and the Firm's accounting for them, see Lending-related commitments on page 53 and Note 21 (including the table that presents the related amounts by contractual maturity as of June 30, 2016). For a discussion of liabilities associated with loan sales- and securitization-related indemnifications, see Note 21.

CONSOLIDATED CASH FLOWS ANALYSIS

Consolidated cash flows overview

The following is a discussion of cash flow activities during the six months ended June 30, 2016 and 2015.

Six months ended

(in millions) June 30,

2016 2015

Net cash provided by/(used in)

Operating activities \$(22,907) \$32,175
Investing activities (52,064) 77,471
Financing activities 74,159 (113,429)
Effect of exchange rate changes on cash
Net decrease in cash and due from banks \$(780) \$(3,736)

Operating activities

Operating assets and liabilities can vary significantly in the normal course of business due to the amount and timing of cash flows, which are affected by client-driven and risk management activities and market conditions. The Firm believes cash flows from operations, available cash balances and its capacity to generate cash through secured and unsecured sources are sufficient to meet the Firm's operating liquidity needs.

Cash used in operating activities in 2016 resulted from an increase in accrued interest and accounts receivables driven by higher client receivables related to client-driven market-making activities in CIB. Additionally, in 2016, cash used reflected an increase in trading assets, which was predominantly offset by an increase in trading liabilities, reflecting client-driven market-making activities in CIB. In 2016 and 2015, cash was provided by net income after noncash operating adjustments; partially offset by higher net originations and purchases of loans held-for-sale. In 2015, cash was provided by a decrease in trading assets which more than offset cash used by a decrease in trading liabilities predominantly due to client-driven market-making activities in CIB; and a decrease in securities borrowed resulting from lower demand for securities to cover customer short positions in CIB.

#### Investing activities

Cash used in investing activities during 2016 resulted from net originations of consumer and wholesale loans. The increase in wholesale loans was driven by strong originations of commercial and industrial loans in CB and CIB, and commercial real estate loans in CB. The increase in consumer loans reflects retention of originated high-quality prime mortgages and growth in auto loans. Additionally, in 2016, cash outflows reflected an increase in securities purchased under resale agreements due to higher demand for securities to cover short positions related to client-driven market-making activities in CIB, and the deployment of excess cash by Treasury. Partially offsetting these cash outflows were net proceeds from paydowns, maturities, sales and purchases of investment securities. Cash provided by investing activities during 2015 predominantly resulted from a net decrease in deposits with banks which was attributable to lower wholesale non-operating deposits; and net proceeds from paydowns, maturities, sales and purchases of investment securities. Partially offsetting these inflows was cash used for net originations of consumer and wholesale loans.

#### Financing activities

Cash provided by financing activities in 2016 resulted from higher consumer and wholesale deposits. Consumer deposits increased due to the continued growth from new and existing customers, as well as the impact of low attrition rates. Wholesale deposits increased reflecting growth in client activity in Treasury Services. Cash was also provided in 2016 by an increase in securities loaned or sold under repurchase agreements due to higher secured financing of investment securities in CIO, and higher client-driven market-making activities in CIB; and net proceeds from long-term borrowings. Cash used in financing activities in 2015 resulted from lower wholesale deposits, reflecting the Firm's actions to reduce non-operating deposits, partially offset by higher consumer deposits. Partially offsetting these outflows were net proceeds from long-term borrowings. For both periods, cash was used for repurchases of common stock and dividends on common and preferred stock. In 2015 cash was provided by the issuance of preferred stock.

\* \* \*

For a further discussion of the activities affecting the Firm's cash flows, see Consolidated Balance Sheets Analysis on pages 12–13, Capital Management on pages 63–69, and Liquidity Risk Management on pages 70–74 of this Form 10-Q, and page 75 of JPMorgan Chase's 2015 Annual Report.

# EXPLANATION AND RECONCILIATION OF THE FIRM'S USE OF NON-GAAP FINANCIAL MEASURES AND KEY PERFORMANCE MEASURES

#### Non-GAAP financial measures

The Firm prepares its Consolidated Financial Statements using U.S. GAAP; these financial statements appear on pages 81–85. That presentation, which is referred to as "reported" basis, provides the reader with an understanding of the Firm's results that can be tracked consistently from year-to-year and enables a comparison of the Firm's performance with other companies' U.S. GAAP financial statements.

In addition to analyzing the Firm's results on a reported basis, management reviews the Firm's results, including the overhead ratio and the results of the lines of business, on a "managed" basis, which are non-GAAP financial measures. The Firm's definition of managed basis starts with the reported U.S. GAAP results and includes certain reclassifications to present total net revenue for the Firm (and each of the reportable business segments) on an FTE basis. Accordingly, revenue from investments that receive tax credits and tax-exempt securities is presented in the

managed results on a basis comparable to taxable investments and securities. This non-GAAP financial measure allows management to assess the comparability of revenue from year-to-year arising from both taxable and tax-exempt sources. The corresponding income tax impact related to tax-exempt items is recorded within income tax expense. These adjustments have no impact on net income as reported by the Firm as a whole or by the lines of business.

Management also uses certain non-GAAP financial measures at the business-segment level, because it believes these other non-GAAP financial measures provide information to investors about the underlying operational performance and trends of the particular business segment and, therefore, facilitate a comparison of the business segment with the performance of its competitors. Non-GAAP financial measures used by the Firm may not be comparable to similarly named non-GAAP financial measures used by other companies.

The following summary table provides a reconciliation from the Firm's reported U.S. GAAP results to managed basis.

2015

Three months ended June 30,

1,678

2016

Income before income tax expense 16,918

	2016			2015		
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments <sup>(a)</sup>	Managed basis	Reported results	Fully taxable-equivalent adjustments <sup>(a)</sup>	Managed basis
Other income	\$1,261	\$ 529	\$1,790	\$586	\$ 447	\$1,033
Total noninterest revenue	13,033	529	13,562	13,128	447	13,575
Net interest income	11,347	305	11,652	10,684	272	10,956
Total net revenue	24,380	834	25,214	23,812	719	24,531
Pre-provision profit	10,742	834	11,576	9,312	719	10,031
Income before income tax expense	9,340	834	10,174	8,377	719	9,096
Income tax expense	\$3,140	\$ 834	\$3,974	\$2,087	\$ 719	\$2,806
Overhead ratio	56 %	NM	54 %	61 %	NM	59 %
	Six month	ns ended June 30,		2015		
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments <sup>(a)</sup>	Managed basis	Reported results	Fully taxable-equivalent adjustments <sup>(a)</sup>	Managed basis
Other income	\$2,062	\$ 1,080	\$3,142	\$1,168	\$ 928	\$2,096
Total noninterest revenue	24,892	1,080	25,972	26,517	928	27,445
Net interest income	22,727	598	23,325	21,361	545	21,906
Total net revenue	47,619	1,678	49,297	47,878	1,473	49,351
Pre-provision profit	20,144	1,678	21,822	18,495	1,473	19,968

18,596

16,601

1,473

18,074

Income tax expense	\$5,198 \$ 1,678	\$6,876 \$4,397 \$ 1,473	\$5,870
Overhead ratio	58 % NM	56 % 61 % NM	60 %

(a) Predominantly recognized in CIB and CB business segments and Corporate.

Additionally, certain credit metrics and ratios disclosed by the Firm are non-GAAP measures. For additional information on these non-GAAP measures, see Credit Risk Management on pages 41–57.

Net interest income excluding markets-based activities

In addition to reviewing net interest income on a managed basis, management also reviews net interest income excluding CIB's markets-based activities to assess the performance of the Firm's lending, investing (including asset-liability management) and deposit-raising activities.

The data presented below are non-GAAP financial measures due to the exclusion of CIB's markets-based net interest income and related assets. Management believes this exclusion provides investors and analysts with another measure by which to analyze the non-markets-related business trends of the Firm and provides a comparable measure to other financial institutions that are primarily focused on lending, investing and deposit-raising activities.

#### Net interest income excluding CIB markets-based activities data

	Three month	ns ended June 3	0,	Six months e	,	
(in millions, except rates)	2016	2015	Change	2016	2015	Change
Net interest income – managed basi(a)(b)	\$11,652	\$10,956	6 %	\$23,325	\$21,906	6 %
Less: Markets-based net interest income	1,420	1,238	15	2,798	2,497	12
Net interest income excluding markets <sup>(a)</sup>	\$10,232	\$9,718	5	\$20,527	\$19,409	6
Average interest-earning assets	\$2,079,525	\$2,097,637	(1)	\$2,061,754	\$2,123,078	(3)
Less: Average markets-based	\$2,077,323	Ψ2,077,037	(1)	Ψ2,001,734	\$2,123,076	(3)
interest-earning assets	494,303	500,915	(1)	491,068	505,290	(3)
Average interest-earning assets excluding markets	\$1,585,222	\$1,596,722	(1)%	\$1,570,686	\$1,617,788	(3)%
Net interest yield on average interest-earning assets – managed basis	2.25	%2.09 %		2.28	%2.08	%
Net interest yield on average markets-based interest-earning assets	1.16	0.99		1.15	1.00	
Net interest yield on average interest-earning assets excluding markets	2.60	% 2.44 %		2.63	%2.42	%

<sup>(</sup>a) Interest includes the effect of related hedging derivatives. Taxable-equivalent amounts are used where applicable.

#### Key performance measures

Tangible common equity ("TCE"), ROTCE and TBVPS are considered key financial performance measures, TCE represents the Firm's common stockholders' equity (i.e., total stockholders' equity less preferred stock) less goodwill and identifiable intangible assets (other than MSRs), net of related deferred tax liabilities. ROTCE measures the Firm's net income applicable to common equity as a percentage of average TCE. TBVPS represents the Firm's TCE at period-end divided by common shares at period-end. TCE, ROTCE, and TBVPS are meaningful to the Firm, as well as investors and analysts, in assessing the Firm's use of equity.

The following summary table provides a reconciliation from the Firm's common stockholders' equity to TCE.

Tangible common equity	Period-end		Average				
(in millions, except per share and ratio data)	Jun 30 Dec 31		Three monty June 30, 2016	ths ended 2015	Six months ended June 30, 2016 2015		
Common stockholders' equity	\$226,355	\$\$221,505	\$224,429	\$213,738	\$222,995	\$213,049	
Less: Goodwill	47,303	47,325	47,309	47,485	47,320	47,488	
Less: Certain identifiable intangible assets	917	1,015	928	1,113	957	1,138	
Add: Deferred tax liabilities <sup>(a)</sup>	3,220	3,148	3,213	2,873	3,195	2,868	

For a reconciliation of net interest income on a reported and managed basis, see reconciliation from the Firm's reported U.S. GAAP results to managed basis on page 16

Tangible common equity \$181,355\$176,313 \$179,405 \$168,013 \$177,913 \$167,291

Return on tangible common equity NA NA 13 %14 % 12 %14 % Tangible book value per share \$50.21 \$48.13 NA NA NA NA

(a) Represents deferred tax liabilities related to tax-deductible goodwill and to identifiable intangibles created in nontaxable transactions, which are netted against goodwill and other intangibles when calculating TCE. The Firm's capital, RWA and capital ratios that are presented under Basel III Standardized and Advanced Fully Phased-In rules and the Firm's and JPMorgan Chase Bank, N.A.'s and Chase Bank USA, N.A.'s SLRs calculated under the Basel III Advanced Fully Phased-In rules are considered key regulatory capital measures. Such measures are used by banking regulators, investors and analysts to assess the Firm's capital position and to compare the Firm's capital to that of other financial services companies. For additional information on these measures, see Capital Management on pages 63–69.

#### BUSINESS SEGMENT RESULTS

The Firm is managed on a line of business basis. There are four major reportable business segments – Consumer & Community Banking, Corporate & Investment Bank, Commercial Banking and Asset Management. In addition, there is a Corporate segment.

The business segments are determined based on the products and services provided, or the type of customer served, and they reflect the manner in which financial information is currently evaluated by management. Results of these lines of business are presented on a managed basis. For a definition of managed basis, see Explanation and Reconciliation of the Firm's use of Non-GAAP Financial Measures and Key Performance Measures, on pages 16–17. Description of business segment reporting methodology

Results of the business segments are intended to reflect each segment as if it were a stand-alone business. The management reporting process that derives business segment results allocates income and expense using

market-based methodologies. The Firm also assesses the level of capital required for each line of business on at least an annual basis. For further information about line of business capital, see Line of business equity on page 67. The Firm periodically assesses the assumptions, methodologies and reporting classifications used for segment reporting, and further refinements may be implemented in future periods.

For a further discussion of those methodologies, see Business Segment Results – Description of business segment reporting methodology on pages 83–84 of JPMorgan Chase's 2015 Annual Report.

The following discussions of the business segment results are based on a comparison of the three and six months ended June 30, 2016 versus the corresponding period in the prior year, unless otherwise specified.

#### Segment Results - Managed basis

The following tables summarize the business segment results for the periods indicated.

Three months ended June 30,	Total ne	revenue		Total no	ninterest	expense	Pre-provision profit/(loss)			
(in millions)	2016	2015	Change	2016	2015	Change	2016	2015	Change	
Consumer & Community Banking	\$11,451	\$11,015	4%	\$6,004	\$6,210	(3)%	\$5,447	\$4,805	13%	
Corporate & Investment Bank	9,165	8,723	5	5,078	5,137	(1)	4,087	3,586	14	
Commercial Banking	1,817	1,739	4	731	703	4	1,086	1,036	5	
Asset Management	2,939	3,175	(7)	2,098	2,406	(13)	841	769	9	
Corporate	(158	)(121	)(31 )	(273	)44	NM	115	(165	)NM	
Total	\$25,214	\$24,531	3%	\$13,638	\$14,500	0(6)%	\$11,570	5\$10,031	15%	
	Provisio	n for credi	i t			Return	on			
Three months ended June 30,	Provision for credit losses Net in			income/(l	oss)	commo	on			
	103503	108868								
(in millions, except ratios)	2016	2015 Char	nge 201	6 2015	Change	e 2016	2015			
Consumer & Community Banking	\$1,201	\$70271	% \$2,	556 \$2,53	335%	20 %	519 %			
Corporate & Investment Bank	235	50 370	2,49	93 2,341	6	15	14			
Commercial Banking	(25)	182 NM	696	525	33	16	14			
Asset Management	(8)	— NM	521	451	16	22	19			
Corporate	(1)	1 NM	(16	5 )440	NM	NM	NM			
Total	\$1,402	\$93550	% \$6,	200 \$6,29	90(1)%	10%	11 %			
Six months ended June 30,	Total ne	revenue		Total no	ninterest	expense	Pre-pro	vision pr	ofit/(loss)	
(in millions)	2016	2015	Change	2016	2015	Change	2016	2015	Change	
Consumer & Community Banking	\$22,568	\$21,719	4%	\$12,092	\$12,400	0(2)%	\$10,47	5\$9,319	12 %	
Corporate & Investment Bank	17,300	18,305	(5)	9,886	10,794	(8)	7,414	7,511	(1)	
Commercial Banking	3,620	3,481	4	1,444	1,412	2	2,176	2,069	5	
Asset Management	5,911	6,180	(4)	4,173	4,581	(9)	1,738	1,599	9	

Corporate	(102	)(334	)69	(120	)196	NM	18	(.	530	)NM	[
Total	\$49,297	\$49,35	51 —	\$27,47	75 \$29,3	883(6)	% \$21,	822\$	19,968	9	%
Six months ended June 30,	Provisio losses	on for cre	edit	Net incom	me/(loss)	)	Return common equity				
(in millions, except ratios)	2016	2015	Change	2016	2015	Change	2016	2015	j .		
Consumer & Community Banking	\$2,251	\$1,632	38%	\$5,146	\$4,752	8%	19 %	18	%		
Corporate & Investment Bank	694	19	NM	4,472	4,878	(8)	13	15			
Commercial Banking	279	243	15	1,192	1,123	6	14	15			
Asset Management	5	4	25	1,108	953	16	24	21			
Corporate	(3	(4	25	(198	)498	NM	NM	NM			
Total	\$3,226	\$1,894	70%	\$11,720	\$12,204	4(4)%	10%	11	%		

# CONSUMER & COMMUNITY BANKING

For a discussion of the business profile of CCB, see pages 85–93 of JPMorgan Chase's 2015 Annual Report and Line of Business Metrics on page 174.

Selected income statement data

	Three months ended June					Six months ended June 30,					
	30,							•			
(in millions, except ratios)	2016		2015		Change	2016	2015		Cha	ange	
Revenue											
Lending- and deposit-related fees	\$780		\$766		2 %	\$1,549	\$1,484		4	%	
Asset management, administration and commissions			553		(3)	1,065	1,083		(2	)	
Mortgage fees and related income	689		782		(12)	1,356	1,486		(9	)	
Card income	1,253		1,506		(17)	2,444	2,830		(14	)	
All other income	881		482		83	1,530	942		62		
Noninterest revenue	4,138		4,089		1	7,944	7,825		2		
Net interest income	7,313		6,926		6	14,624	13,894		5		
Total net revenue	11,451		11,015		4	22,568	21,719		4		
Provision for credit losses	1,201		702		71	2,251	1,632		38		
Noninterest expense											
Compensation expense	2,420		2,478		(2)	4,802	5,008		(4	)	
Noncompensation expense	3,584		3,732		(4)	7,290	7,392		(1	)	
Total noninterest expense <sup>(a)</sup>	6,004		6,210		(3)	12,092	12,400	)	(2	)	
Income before income tax expense	4,246		4,103		3	8,225	7,687		7		
Income tax expense	1,590		1,570		1	3,079	2,935		5		
Net income	\$2,656		\$2,533		5	\$5,146	\$4,752	2	8		
Revenue by line of business											
Consumer & Business Banking	\$4,616		\$4,483		3	\$9,166	\$8,841		4		
Mortgage Banking	1,921		1,833		5	3,797	3,582		6		
Card, Commerce Solutions & Auto	4,914		4,699		5	9,605	9,296		3		
Mortgage fees and related income details:											
Net production revenue	261		233		12	423	470		(10	)	
Net mortgage servicing revenue <sup>(b)</sup>	428		549		(22)	933	1,016		(8	)	
Mortgage fees and related income	\$689		\$782		(12)%	\$1,356	\$1,486	)	(9	)%	
Financial ratios											
Return on common equity	20	%	19	%		19 %	18	%			
Overhead ratio	52		56			54	57				

Note: In the discussion and the tables which follow, CCB presents certain financial measures which exclude the impact of PCI loans; these are non-GAAP financial measures. For additional information, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17. Included operating lease depreciation expense of \$460 million and \$348 million for the three months ended June (a) 30, 2016 and 2015, respectively, and \$892 million and \$674 million for the six months ended June 30, 2016 and 2015, respectively.

(b) Included MSR risk management of \$73 million and \$70 million for the three months ended June 30, 2016 and 2015, respectively, and \$202 million and \$2 million for the six months ended June 30, 2016 and 2015, respectively.

#### Quarterly results

Consumer & Community Banking net income was \$2.7 billion, an increase of 5%, driven by higher net revenue and lower noninterest expense, predominantly offset by higher provision for credit losses.

Net revenue was \$11.5 billion, an increase of 4%. Net interest income was \$7.3 billion, up 6%, driven by higher deposit balances and higher loan balances largely resulting from originations of prime mortgage loans that have been retained, partially offset by deposit spread compression. Noninterest revenue was \$4.1 billion, up 1%, driven by a gain on the sale of Visa Europe interests, higher auto lease and card sales volume and higher deposit-related fees, predominantly offset by the impact of renegotiated co-brand partnership agreements in Credit Card, lower mortgage servicing revenue largely as a result of a lower level of third-party loans serviced, and higher amortization of new account origination costs in Credit Card. Noninterest revenue also included fair value losses on the investment in Square, Inc.

The provision for credit losses was \$1.2 billion, an increase of 71%, reflecting increases in the allowance for loan losses. The current-quarter provision included a \$175 million increase in the allowance for loan losses, reflecting increases in the credit card and auto loan portfolios, primarily driven by higher loss rates in newer card vintages, as well as growth in the card and auto loan portfolios, partially offset by reductions in the allowance for loan losses due to continued improvement in home prices and delinquencies in the residential real estate portfolio as well as runoff in the student loan portfolio. The prior-year provision reflected a \$326 million reduction in the allowance for loan losses due to continued improvement in home prices and delinquencies in the residential real estate portfolio as well as runoff in the student loan portfolio.

Noninterest expense was \$6.0 billion, a decrease of 3%, driven by lower legal expense, branch efficiencies and lower headcount-related expense, largely offset by higher auto lease depreciation.

#### Year-to-date results

Consumer & Community Banking net income was \$5.1 billion, an increase of 8%, driven by higher net revenue and lower noninterest expense, largely offset by higher provision for credit losses.

Net revenue was \$22.6 billion, an increase of 4%. Net interest income was \$14.6 billion, up 5%, driven by higher deposit balances and higher loan balances largely resulting from originations of prime mortgage loans that have been retained, partially offset by deposit spread compression. Noninterest revenue was \$7.9 billion, up 2%, driven by a gain on the sale of Visa Europe interests, higher auto lease and card sales volume, higher MSR risk management results and higher deposit-related fees, predominantly offset by the impact of renegotiated co-brand partnership agreements in Credit Card, lower mortgage servicing revenue largely as a result of a lower level of third-party loans serviced, and higher amortization of new account origination costs in Credit Card. See Note 16 for further information regarding changes in value of the MSR asset and related hedges.

and mortgage fees and related income. Noninterest revenue also included fair-value losses on the investment in Square, Inc.

The provision for credit losses was \$2.3 billion, an increase of 38%, reflecting increases in the allowance for loan losses. The current-year provision included a \$175 million increase in the allowance for loan losses, reflecting increases in the credit card and auto loan portfolios, primarily driven by higher loss rates in newer card vintages, as well as growth in the card and auto loan portfolios, partially offset by reductions in the allowance for loan losses due to continued improvement in home prices and delinquencies in the residential real estate portfolio as well as runoff in the student loan portfolio. The prior-year provision reflected a \$451 million reduction in the allowance for loan losses due to continued improvement in home prices and delinquencies in the residential real estate portfolio as well as runoff in the student loan portfolio.

Noninterest expense was \$12.1 billion, a decrease of 2%, driven by lower legal expense, branch efficiencies and lower headcount-related expense, largely offset by higher auto lease depreciation and higher investment in marketing.

# Selected metrics

	As of or feed Jun		months	As of or for the six months ended June 30,			
(in millions, except headcount)	2016	2015	Change	2016	2015	Change	
Selected balance sheet data (period-end)							
Total assets	\$519,187	\$472,181	10 %	\$519,187	\$472,181	10 %	
Loans:							
Consumer & Business Banking	23,588	21,940	8	23,588	21,940	8	
Home equity	54,569	63,316	(14)	54,569	63,316	(14)	
Residential mortgage and other	178,670	139,814	28	178,670	139,814	28	
Mortgage Banking	233,239	203,130	15	233,239	203,130	15	
Credit Card	131,591	126,025	4	131,591	126,025	4	
Auto	64,056	56,330	14	64,056	56,330	14	
Student	7,614	8,763	(13)	7,614	8,763	(13)	
Total loans	460,088	416,188	11	460,088	416,188	11	
Core loans	364,007	301,154	21	364,007	301,154	21	
Deposits	586,074	530,767	10	586,074	530,767	10	
Common equity	51,000	51,000	_	51,000	51,000		
Selected balance sheet data (average)							
Total assets	\$512,434	\$463,404	11	507,833	\$459,108	11	
Loans:							
Consumer & Business Banking	23,223	21,732	7	22,998	21,526	7	
Home equity	55,615	64,502	(14)	56,666	65,671	(14)	
Residential mortgage and other	175,753	132,649	32	172,224	126,687	36	
Mortgage Banking	231,368	197,151	17	228,890	192,358	19	
Credit Card	128,396	124,539	3	127,848	124,780	2	
Auto	63,661	55,800	14	62,456	55,405	13	
Student	7,757	8,907	(13)	7,896	9,057	(13)	
Total loans	454,405	408,129	11	450,088	403,126	12	
Core loans	356,380	290,330	23	350,042	282,498	24	
Deposits	583,115	529,448	10	572,699	520,850	10	
Common equity	51,000	51,000	_	51,000	51,000	_	
Headcount	131,815	132,302	_	131,815	132,302	%	

#### Selected metrics

	As of or f		e months	As of or for the six months ended June 30,			
(in millions, except ratio data) Credit data and quality statistics	2016	2015	Change	2016	2015	Change	
Nonaccrual loans <sup>(a)(b)</sup>	\$4,980	\$5,876	(15)%	\$4,980	\$5,876	(15)%	
Net charge-offs <sup>(c)</sup>							
Consumer & Business Banking	53	68	(22)	109	127	(14)	
Home equity	35	69	(49)	94	156	(40)	
Residential mortgage and other	3	12	(75)	4	29	(86)	
Mortgage Banking	38	81	(53)	98	185	(47)	
Credit Card	860	800	8	1,690	1,589	6	
Auto	46	32	44	113	83	36	
Student	29	46	(37)	66	97	(32)	
Total net charge-offs	\$1,026	\$1,027	_	2,076	\$2,081	_	
Net charge-off rate <sup>(c)</sup>							
Consumer & Business Banking	0.92 %	1.26 %		0.95 %	1.19		
Home equity <sup>(d)</sup>	0.34	0.57		0.45	0.64		
Residential mortgage and other <sup>(d)</sup>	0.01	0.05		0.01	0.06		
Mortgage Banking(d)	0.08	0.21		0.10	0.25		
Credit Card <sup>(e)</sup>	2.70	2.61		2.66	2.61		
Auto	0.29	0.23		0.36	0.30		
Student	1.50	2.07		1.68	2.16		
Total net charge-off rate <sup>(d)</sup>	0.99	1.14		1.02	1.18		
30+ day delinquency rate							
Mortgage Banking(f)(g)	1.33 %	1.95 %		1.33	1.95		
Credit Card <sup>(h)</sup>	1.40	1.29		1.40	1.29		
Auto	1.16	0.95		1.16	0.95		
Student <sup>(i)</sup>	1.43	2.00		1.43	2.00		
90+ day delinquency rate — Credit Callel	0.70	0.63		0.70	0.63		
Allowance for loan losses							
Consumer & Business Banking	\$703	\$703	_	\$703	\$703		
Mortgage Banking excluding PCI loans	1,488	1,788	(17)	1,488	1,788	(17)	
Mortgage Banking — PCI loans	2,654	3,215	(17)	2,654	3,215	(17)	
Credit Card	3,684	3,434	7	3,684	3,434	7	
Auto	449	349	29	449	349	29	
Student	274	349	(21)	274	349	(21)	
Total allowance for loan losses(c)	\$9,252	\$9,838	(6)%	\$9,252	\$9,838		
(a) Evaludas PCI loons. The Firm is record		roct incom		•	-	. ,	

<sup>(</sup>a) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as they are all performing. At June 30, 2016 and 2015, nonaccrual loans excluded loans 90 or more days past due as follows: (1) mortgage loans insured by U.S. government agencies of \$5.2 billion and \$7.0 billion, respectively; and (2) student loans

<sup>(</sup>b) insured by U.S. government agencies of \$5.2 billion and \$7.0 billion, respectively, and (2) student loans insured by U.S. government agencies under the Federal Family Education Loan Program ("FFELP") of \$252 million and \$282 million, respectively. These amounts have been excluded based upon the government guarantee.

Net charge-offs and the net charge-off rates for the three months ended June 30, 2016 and 2015, excluded \$41 million and \$55 million, respectively, and for the six months ended June 30, 2016 and 2015, excluded \$88 million and \$110 million, respectively, of write-offs in the PCI portfolio. These write-offs decreased the allowance for loan losses for PCI loans. For further information on PCI write-offs, see summary of changes in the allowances on page 56.

- Excludes the impact of PCI loans. For the three months ended June 30, 2016 and 2015, the net charge-off rates including the impact of PCI loans were as follows: (1) home equity of 0.25% and 0.43%, respectively; (2) residential mortgage and other of 0.01% and 0.04%, respectively; (3) Mortgage Banking of 0.07% and 0.17%,
- (d) respectively; and (4) total CCB of 0.91% and 1.01%, respectively. For the six months ended June 30, 2016 and 2015, the net charge-off rates including the impact of PCI loans were as follows: (1) home equity of 0.33% and 0.48%, respectively; (2) residential mortgage and other of –% and 0.05%, respectively; (3) Mortgage Banking of 0.09% and 0.19%, respectively; and (4) total CCB of 0.93% and 1.05%, respectively.
- Average credit card loans included loans held-for-sale of \$82 million and \$1.8 billion for the three months ended (e) June 30, 2016 and 2015, respectively, and \$77 million and \$2.2 billion for the six months ended June 30, 2016 and 2015, respectively. These amounts are excluded when calculating the net charge-off rate.
- At June 30, 2016 and 2015, excluded mortgage loans insured by U.S. government agencies of \$7.2 billion and \$8.8 (f) billion, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.
- Excludes PCI loans. The 30+ day delinquency rate for PCI loans was 10.09% and 11.65% at June 30, 2016 and 2015, respectively.
- (h) Period-end credit card loans included loans held-for-sale of \$84 million and \$1.3 billion at June 30, 2016 and 2015, respectively. These amounts are excluded when calculating delinquency rates.
  - Excluded student loans insured by U.S. government agencies under FFELP of \$458 million and \$546 million at
- (i) June 30, 2016 and 2015, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.

Selected metrics						
	As of or formonths ended June		2	As of or f	for the six in the 30,	months
(in billions, except ratios and where otherwise noted) Business Metrics		2015	Change	2016	2015	Change
CCB households (in millions) Number of branches		57.8 5,504	2 % (3 )	59.2 5,366	57.8 5,504	2 % (3 )
Active digital customers (in thousands) <sup>(a)</sup>		37,878	13	42,833	37,878	13
Active mobile customers (in thousands) <sup>(b)</sup>	24,817	21,001	18	24,817	21,001	18
Consumer & Business Banking Average deposits Deposit margin		\$512.8 1.92 %	11	\$557.9 1.83 %	505.3 1.95 %	10
Business banking origination volume Client investment assets	\$2.2	\$1.9 221.5	14 1	\$3.9 224.7	\$3.5 221.5	12 1
Mortgage Banking Mortgage origination volume by channel						
Retail Correspondent Total mortgage origination volume <sup>(c)</sup>	13.8	\$9.8 19.5 \$29.3	14 (29 ) (15 )	\$19.9 27.5 \$47.4	\$17.9 36.1 \$54.0	11 (24 ) (12 )
Total loans serviced (period-end) Third-party mortgage loans serviced (period-end) MSR carrying value (period-end) Ratio of MSR carrying value (period-end) to third-party	629.9	\$917.0 723.4 7.6	(4 ) (13 ) (33 )	\$880.3 629.9 5.1	\$917.0 723.4 7.6	(4 ) (13 ) (33 )
mortgage loans serviced (period-end)	0.81 %	1.05 %		0.81 %	1.05 %	
MSR revenue multiple(d)	2.31 x	3.00 x		2.31 x	3.00 x	
Credit Card, excluding Commercial Card Sales volume New accounts opened		\$125.7	8	\$257.7	\$238.5	8
(in millions)	2.7	2.1	29	5.0	4.2	19
Card Services Net revenue rate	12.28 %	12.35 %		12.04 %	12.27 %	
Commerce Solutions Merchant processing volume	\$263.8	\$234.1	13	\$511.3	\$455.3	12

\$8.5

10.4

(a) Users of all web and/or mobile platforms who have logged in within the past 90 days.

\$7.8

7.4

9

40%

\$18.1

10.0

\$15.1

7.2

Auto

Loan and lease origination volume

Average Auto operating lease assets

20

40%

- (b) Users of all mobile platforms who have logged in within the past 90 days. Firmwide mortgage origination volume was \$28.6 billion and \$31.7 billion for the three months ended June 30,
- (c) 2016 and 2015, respectively, and \$53.0 billion and \$58.3 billion for the six months ended June 30, 2016 and 2015, respectively.
- (d) Represents the ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end) divided by the ratio of annualized loan servicing-related revenue to third-party mortgage loans serviced (average).

#### Mortgage servicing-related matters

The Firm entered into various Consent Orders and settlements with federal and state governmental agencies and private parties related to mortgage servicing, origination, and residential mortgage-backed securities activities. The majority of these Consent Orders and settlements have subsequently been resolved and/or terminated; however, among those obligations, the mortgage servicing-related Consent Order entered into with the Federal Reserve on April 13, 2011, as amended on February 28, 2013 remains outstanding. The Audit Committee of the Board of Directors provides governance and oversight of the Federal Reserve Consent Order.

The Federal Reserve Consent Order and certain other obligations under mortgage-related settlements are the subject of ongoing reporting to various regulators and independent overseers. The Firm's compliance with certain of these settlements is detailed in periodic reports published by the independent overseers. The Firm is committed to fulfilling these commitments with appropriate due diligence and oversight.

#### **CORPORATE**

&

**INVESTMENT** 

**BANK** 

For a discussion of the business profile of CIB, see pages 94–98 of JPMorgan Chase's 2015 Annual Report and Line of Business Metrics on page 174.

Selected income statement data

	Three months ended June 30,			Six months ended June 30,		
(in millions, except ratios)	2016	2015	Change	2016	2015	Change
Revenue	2010	2013	Change	2010	2013	Change
Investment banking fees	\$1,636	\$1,825	(10.)%	\$2,957	\$3,586	(18)%
Principal transactions	2,965	2,657	12	5,435	6,139	(11)
Lending- and deposit-related fees	385	400	(4)	779	797	(2)
Asset management, administration and commissions	1,025	1,181	(13)	2,094	2,335	(10)
All other income	464	170	173	744	450	65
Noninterest revenue	6,475	6,233	4	12,009	13,307	(10)
Net interest income	2,690	2,490	8	5,291	4,998	6
Total net revenue <sup>(a)</sup>	9,165	8,723	5	17,300	18,305	(5)
Provision for credit losses	235	50	370	694	19	NM
N						
Noninterest expense	2.525	2 656	2	5 00 <b>5</b>	5 (50	(6)
Compensation expense	2,737	2,656	3	5,337	5,679	(6)
Noncompensation expense	2,341	2,481	(6)	4,549	5,115	(11)
Total noninterest expense	5,078	5,137	(1)	9,886	10,794	(8)
Income before income tax expense	3,852	3,536	9	6,720	7,492	(10)
Income tax expense	1,359	1,195	14	2,248	2,614	(14)
Net income	\$2,493	\$2,341	6%	\$4,472	\$4,878	(8)%
Financial ratios						
Return on common equity	15 %	14 %	)	13 %	15 %	6
Overhead ratio	55	59		57	59 %	6
Compensation expense as a percentage of total net revenue	30	30		31	31	
· · · · · · · · · · · · · · · · · · ·						

Included tax-equivalent adjustments, predominantly due to income tax credits related to alternative energy investments; income tax credits and amortization of the cost of investments in affordable housing projects; as well (a) as tax-exempt income from municipal bonds of \$476 million and \$396 million for the three months ended June 30, 2016 and 2015, respectively and \$974 million and \$828 million for the six months ended June 30, 2016 and 2015, respectively.

Selected income statement data

	Three months ended			Six months ended June 30,				
	June 30,			31x months ended fune 30				
(in millions)	2016	2015	Change	2016	2015	Chai	nge	
Revenue by business								
Investment Banking	\$1,492	\$1,746	(15)%	\$2,723	\$3,376	(19	)%	
Treasury Services	892	901	(1)	1,776	1,831	(3	)	
Lending	277	302	(8)	579	737	(21	)	
Total Banking	2,661	2,949	(10)	5,078	5,944	(15	)	
Fixed Income Markets	3,959	2,931	35	7,556	7,085	7		
Equity Markets	1,600	1,576	2	3,176	3,227	(2	)	
Securities Services	907	995	(9)	1,788	1,929	(7	)	

Credit Adjustments & Other <sup>(a)</sup>	38	272	(86)		(298)	120	NM
Total Markets & Investor Services	6,504	5,774	13		12,222	12,361	(1)
Total net revenue	\$9,165	\$8,723	5	%	\$17,300	\$18,305	(5)%

Effective January 1, 2016, consists primarily of credit valuation adjustments ("CVA") managed by the Credit Portfolio Group, funding valuation adjustments ("FVA") and DVA on derivatives. Prior periods also include DVA on fair value option elected liabilities. Results are presented net of associated hedging activities and net of CVA and FVA amounts allocated to Fixed Income Markets and Equity Markets. Effective January 1, 2016, changes in DVA on fair value option elected liabilities is recognized in other comprehensive income. For additional information, see Notes 3, 4 and 19.

#### Quarterly results

Net income was \$2.5 billion, up 6%, reflecting higher net revenue, partially offset by higher provisions for credit losses.

Banking revenue was \$2.7 billion, down 10%. Investment banking revenue was \$1.5 billion, down 15%, largely driven by lower equity underwriting fees. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Equity underwriting fees were down 37% compared to a strong quarter in the prior year, on lower industry-wide fee levels. Debt underwriting fees were down 2% driven by declines in industry-wide fee levels. Lending revenue was \$277 million, down 8%, reflecting fair value losses on hedges of accrual loans.

Markets & Investor Services revenue was \$6.5 billion, up 13%. Fixed Income Markets revenue was \$4.0 billion, up 35% reflecting strong performance in Rates and Currencies & Emerging Markets on higher client flows driven by increased issuance-related activity, improved global emerging market sentiment and increased volumes in foreign exchange markets. Performance in Credit and Securitized Products also improved as client risk appetite recovered in a less volatile environment driving higher primary and secondary market activity. Securities Services revenue was \$907 million, down 9%, driven by lower fees and commissions. Credit Adjustments & Other was a gain of \$38 million, compared with a gain of \$272 million in the prior year. The prior year quarter included gains on wider funding spreads.

The provision for credit losses was \$235 million, compared with \$50 million in the prior year, primarily reflecting an increase in the allowance for credit losses in the Oil & Gas portfolio driven by a single name. Noninterest expense was \$5.1 billion, down 1%.

#### Year-to-date results

Net income was \$4.5 billion, down 8%, reflecting lower net revenue and higher provisions for credit losses, largely offset by lower noninterest expense.

Banking revenue was \$5.1 billion, down 15%. Investment banking revenue was \$2.7 billion, down 19%. The decrease was primarily driven by lower equity and debt underwriting fees. Equity underwriting fees were \$490 million, down 42% driven by declines in industry-wide fee levels. Debt underwriting fees were \$1.4 billion, down 18%, primarily driven by declines in industry-wide fee levels and fewer large acquisition financing deals. Advisory fees were \$1.1 billion, up 4%, driven by a greater share of fees for completed transactions. Treasury Services revenue was \$1.8 billion, down 3%, primarily driven by business simplification. Lending revenue was \$579 million, down 21%, reflecting fair value losses on hedges of accrual loans.

Markets & Investor Services revenue was \$12.2 billion, down 1%. Fixed Income Markets revenue of \$7.6 billion was up 7% reflecting strong performance in Rates on higher client flows driven by increased issuance-related activity as well as continued demand in Japan driven by ongoing monetary easing. Performance in Credit and Securitized Products also improved as client risk appetite recovered in a less volatile environment driving higher primary and secondary market activity. Equity Markets revenue of \$3.2 billion was down 2% compared to a strong prior year, particularly in Asia. Securities Services revenue was \$1.8 billion, down 7%, largely driven by lower fees and commissions. Credit Adjustments & Other was a loss of \$298 million on widening credit spreads compared with a gain of \$120 million in the prior year.

The provision for credit losses was \$694 million, compared with \$19 million in the prior year, primarily reflecting increases in the allowance for credit losses in the Oil & Gas portfolio and, to a lesser extent, the Metals & Mining portfolio.

Noninterest expense was \$9.9 billion, down 8%, primarily driven by lower compensation and lower legal expense.

# Selected metrics

	As of or feed Jun		mon	ths	As of or for the six months ended June 30,			hs	
(in millions, except headcount)	2016	2015	Char	nge	·			Change	
Selected balance sheet data (period-end)				0				. 8	
Assets	\$826,019	\$819,745	1	%	\$826,019	\$819,745	1	%	
Loans:									
Loans retained <sup>(a)</sup>	112,637	96,579	17		112,637	96,579	17		
Loans held-for-sale and loans at fair value	5,600	7,211	(22)	)	5,600	7,211	(22	)	
Total loans	118,237	103,790	14		118,237	103,790	14		
Core loans	117,821	103,235	14		117,821	103,235	14		
Common equity	64,000	62,000	3		64,000	62,000	3		
Selected balance sheet data (average)									
Assets	\$815,886	\$845,225	(3)	)	\$806,717	\$855,220	(6	)	
Trading assets-debt and equity instruments	306,418	317,385	(3)	)	295,770	314,837	(6	)	
Trading assets-derivative receivables	61,457	68,949	(11)	)	62,007	73,128	(15	)	
Loans:									
Loans retained <sup>(a)</sup>	111,668	94,711	18		110,190	96,900	14		
Loans held-for-sale and loans at fair value	3,169	5,504	(42)	)	3,187	4,786	(33	)	
Total loans	114,837	100,215	15		113,377	101,686	11		
Core loans	114,421	99,343	15		112,919	100,690	12		
Common equity	64,000	62,000	3		64,000	62,000	3		
Headcount	48,805	49,367	(1)	)%	48,805	49,367	(1	)%	

<sup>(</sup>a) Loans retained includes credit portfolio loans, loans held by consolidated Firm-administered multi-seller conduits, trade finance loans, other held-for-investment loans and overdrafts.

$\alpha$		•
Sel	ected	metrics
$\mathcal{L}_{\mathcal{L}}}}}}}}}}$	CCICG	mounts

	As of or for the three			As of or for the six			
	months			months			
		June 30,		ended June 30,			
(in millions, except ratios)	2016	2015	Change	2016	2015	Chang	ge
Credit data and quality statistics							
Net charge-offs/(recoveries)	\$90	\$(15)	NM	\$136	\$(26)	NM	
Nonperforming assets:							
Nonaccrual loans:							
Nonaccrual loans retained <sup>(a)</sup>	623	324	92%	623	324	92	
Nonaccrual loans held-for-sale and loans at fair value	7	12	(42)	7	12	(42	)
Total nonaccrual loans	630	336	88	630	336	88	
Derivative receivables	220	256	(14)	220	256	(14	)
Assets acquired in loan satisfactions	75	60	25	75	60	25	
Total nonperforming assets	925	652	42	925	652	42	
Allowance for credit losses:							
Allowance for loan losses	1,669	1,086	54	1,669	1,086	54	
Allowance for lending-related commitments	715	437	64	715	437	64	
Total allowance for credit losses	2,384	1,523	57%	2,384	1,523	57%	
Net charge-off/(recovery) rate	0.32%	(0.06)%		0.25%	(0.05)%		
Allowance for loan losses to period-end loans retained	1.48	1.12		1.48	1.12		
Allowance for loan losses to period-end loans retained, excluding	2.23	1.73		2.23	1.73		
trade finance and conduits <sup>(b)</sup>	2.23	1.73		2.23	1.73		
Allowance for loan losses to nonaccrual loans retained(a)	268	335		268	335		
Nonaccrual loans to total period-end loans	0.53%	0.32 %		0.53 %	0.32 %		

- (a) Allowance for loan losses of \$211 million and \$64 million were held against these nonaccrual loans at June 30, 2016 and 2015, respectively.
- (b) Management uses allowance for loan losses to period-end loans retained, excluding trade finance and conduits, a non-GAAP financial measure, to provide a more meaningful assessment of CIB's allowance coverage ratio.

### **Business** metrics

	Three n	nonths e	nded	Six months ended June			
	June 30,			30,			
(in millions)	2016	2015	Change	2016	2015	Chang	ge.
Advisory	\$466	\$466		\$1,051	\$1,008	4%	
Equity underwriting	285	452	(37)	490	851	(42	)
Debt underwriting	885	907	(2)	1,416	1,727	(18	)
Total investment banking fees	\$1,636	\$1,825	(10)%	\$2,957	\$3,586	(18)%	

League table results – wallet share

Six months ended Full-year June 30, 2015 2016

	Share	Rank	Share	Rank
Based on fees <sup>(a)</sup>				
Debt, equity and equity-related				
Global	7.1 %	# 1	7.7 %	# 1
U.S.	11.7	1	11.7	1
Long-term debt(b)				
Global	7.0	1	8.3	1
U.S.	11.1	2	12.0	1
Equity and equity-related				
Global <sup>(c)</sup>	7.3	1	7.0	1
U.S.	13.0	1	11.2	1
$M\&A^{(d)}$				
Global	9.9	2	8.4	2
U.S.	11.7	2	9.9	2
Loan syndications				
Global	7.3	2	7.5	1
U.S.	9.1	2	10.7	2
Global investment banking fees(e)	8.0 %	# 1	7.9 %	# 1

- (a) Source: Dealogic. Reflects the ranking of revenue wallet and market share.
- Long-term debt rankings include investment-grade, high-yield, supranationals, sovereigns, agencies, covered
- (b) bonds, asset-backed securities ("ABS") and mortgage-backed securities ("MBS"); and exclude money market, short-term debt, and U.S. municipal securities.
- (c) Global equity and equity-related ranking includes rights offerings and Chinese A-Shares.
- (d) Global M&A reflects the removal of any withdrawn transactions. U.S. M&A revenue wallet represents wallet from client parents based in the U.S.
- (e) Global investment banking fees exclude money market, short-term debt and shelf deals Business metrics

	As of or f		As of or for the six months ended June 30,						
(in millions, except where otherwise noted)	2016	2015	Change	2016	2015	Change			
Assets under custody ("AUC") by asset class (period-end)(in									
billions):									
Fixed Income	\$12,539	\$12,134	3%	\$12,539	\$12,134	3%			
Equity	6,138	6,652	(8)	6,138	6,652	(8)			
Other <sup>(a)</sup>	1,793	1,711	5	1,793	1,711	5			
Total AUC	\$20,470	\$20,497	_	\$20,470	\$20,497	_			

Client deposits and other third party liabilities (average)<sup>(b)</sup> \$373,671 \$401,280 (7) \$366,299 \$422,607 (13) 17,362 21,195 Trade finance loans (period-end) (18)% 17,362 21,195 (18)% Consists of mutual funds, unit investment trusts, currencies, annuities, insurance contracts, options and other contracts.

(b) Client deposits and other third party liabilities pertain to the Treasury Services and Securities Services businesses.

#### International metrics

	As of or for the three months As of or ended June 30, ended Ju					nonths
(in millions, except where otherwise noted) Total net revenue <sup>(a)</sup>	2016	2015	Chang	e 2016	2015	Change
Europe/Middle East/Africa	\$2,823	\$2,685	5 %	\$5,280	\$6,181	(15)%
Asia/Pacific	1,210	1,358	(11)	2,512	2,621	(4)
Latin America/Caribbean	403	220	83	724	551	31
Total international net revenue	4,436	4,263	4	8,516	9,353	(9)
North America	4,729	4,460	6	8,784	8,952	(2)
Total net revenue	\$9,165	\$8,723	5	\$17,300	\$18,305	(5)
Loans retained (period-end) <sup>(a)</sup>						
Europe/Middle East/Africa	\$29,770	\$25,874	15	\$29,770	\$25,874	15
Asia/Pacific	15,198	17,430	(13)	15,198	17,430	(13)
Latin America/Caribbean	9,048	8,768	3	9,048	8,768	3
Total international loans	54,016	52,072	4	54,016	52,072	4
North America	58,621	44,507	32	58,621	44,507	32
Total loans retained	\$112,637	\$96,579	17	\$112,637	\$96,579	17
Client deposits and other third-party liabilities (average) <sup>(a)(b)</sup>						
Europe/Middle East/Africa	\$135,213	\$149,055	(9)	\$131,655	\$154,217	(15)
Asia/Pacific	68,423	64,860	5	65,569	67,872	(3)
Latin America/Caribbean	22,334	23,518	(5)	22,431	23,480	(4)
Total international	\$225,970	\$237,433	(5)	\$219,655	\$245,569	(11)
North America	147,701	163,847	(10)	146,644	177,038	(17)
Total client deposits and other third-party liabilities	\$373,671	\$401,280	(7)	\$366,299	\$422,607	(13)
AUC (period-end) (in billions)(a)						
North America	\$12,310	\$12,068	2	\$12,310	\$12,068	2
All other regions	8,160	8,429	(3)	8,160	8,429	(3)
Total AUC	\$20,470	\$20,497	_	\$20,470	\$20,497	

Total net revenue is based predominantly on the domicile of the client or location of the trading desk, as applicable.

<sup>(</sup>a) Loans outstanding (excluding loans held-for-sale and loans at fair value), client deposits and other third-party liabilities, and AUC are based predominantly on the domicile of the client.

<sup>(</sup>b) Client deposits and other third party liabilities pertain to the Treasury Services and Securities Services businesses.

#### **COMMERCIAL**

#### **BANKING**

For a discussion of the business profile of CB, see pages 99–101 of JPMorgan Chase's 2015 Annual Report and Line of Business Metrics on page 175.

Selected income statement data

	Three months ended				Six months ended Ju			une
	June 3	0,			30,			
(in millions)	2016	2015	Cha	nge	2016	2015	Cha	ange
Revenue								
Lending- and deposit-related fees	\$227	\$242	(6	)%	\$459	\$479	(4	)%
Asset management, administration and commissions	18	22	(18	)	40	46	(13	)
All other income <sup>(a)</sup>	341	345	(1	)	643	720	(11	)
Noninterest revenue	586	609	(4	)	1,142	1,245	(8	)
Net interest income	1,231	1,130	9		2,478	2,236	11	
Total net revenue <sup>(b)</sup>	1,817	1,739	4		3,620	3,481	4	
Provision for credit losses	(25)	182	NM		279	243	15	
Noninterest expense								
Compensation expense	322	308	5		656	617	6	
Noncompensation expense	409	395	4		788	795	(1	)
Total noninterest expense	731	703	4		1,444	1,412	2	
Income before income tax expense	1,111	854	30		1,897	1,826	4	
Income tax expense	415	329	26		705	703	_	
Net income	\$696	\$525	33%	)	\$1,192	\$1,123	6%	

<sup>(</sup>a) Includes revenue from investment banking products and commercial card transactions.

Total net revenue included tax-equivalent adjustments from income tax credits related to equity investments in designated community development entities that provide loans to qualified businesses in low-income communities,

(b) as well as tax-exempt income related to municipal financing activity of \$124 million and \$115 million for the three months ended June 30, 2016 and 2015, respectively and \$244 million and \$228 million for the six months ended June 30, 2016 and 2015, respectively.

#### Quarterly results

Net income was \$696 million, an increase of 33%, driven by higher net revenue and a lower provision for credit losses, partially offset by higher noninterest expense.

Net revenue was \$1.8 billion, an increase of 4%. Net interest income was \$1.2 billion, up 9%, driven by higher average loan balances and deposit spreads.

Noninterest expense was \$731 million, up 4%, driven by continued investments in technology and increased hiring of bankers.

The provision for credit losses was a benefit of \$25 million, compared to an expense of \$182 million in the prior-year. The current quarter benefit reflects continued strong overall credit performance in the portfolio and somewhat more stable market conditions in Oil & Gas while the prior year reflected select downgrades.

#### Year-to-date results

Net income was \$1.2 billion, an increase of 6%, driven by higher net revenue, partially offset by a higher provision for credit losses and higher noninterest expense.

Net revenue was \$3.6 billion, up 4%. Net interest income was \$2.5 billion, up 11%, reflecting higher average loan balances and deposit spreads. Noninterest revenue was \$1.1 billion, down 8%, driven by lower investment banking revenue compared to a record first half last year.

Noninterest expense was \$1.4 billion, up 2%, driven by investments in technology, increased hiring of bankers, and prior year additions to oversight- and control-related personnel.

The provision for credit losses was \$279 million reflecting downgrades in the Oil & Gas and Natural Gas Pipeline portfolios; the prior year provision for credit losses was \$243 million.

Selected income statement data (continued)

	Three n	nonths end	led June	Six month	ne 30,		
(in millions, except ratios)	2016	2015	Change	2016	2015	Change	3
Revenue by product			C			C	
Lending	\$917	\$867	6 %	\$1,845	\$1,692	9 %	
Treasury services	680	646	5	1,374	1,293	6	
Investment banking <sup>(a)</sup>	207	196	6	362	444	(18)	
Other	13	30	(57)	39	52	(25)	
Total Commercial Banking net revenue	\$1,817	\$1,739	4	\$3,620	\$3,481	4	
Investment banking revenue, gross(b)	\$595	\$589	1	\$1,078	\$1,342	(20)	
Revenue by client segment							
Middle Market Banking(c)	\$698	\$679	3	\$1,405	\$1,344	5	
Corporate Client Banking(c)	562	541	4	1,073	1,117	(4)	
Commercial Term Lending	342	318	8	703	626	12	
Real Estate Banking	144	117	23	284	233	22	
Other	71	84	(15)	155	161	(4)	
Total Commercial Banking net revenue	\$1,817	\$1,739	4 %	\$3,620	\$3,481	4 %	
Financial ratios							
Return on common equity	16%	14 %			15 %		
Overhead ratio	40	40		40	41		

<sup>(</sup>a) Revenue by product includes total Firm revenue from investment banking products sold to CB clients, net of revenue sharing with the CIB.

<sup>(</sup>b) Total Firm revenue from investment banking products sold to CB clients.

<sup>(</sup>c) Effective in the second quarter of 2016, certain clients were transferred from Middle Market Banking to Corporate Client Banking. Prior period amounts were revised to conform with the current period presentation.

# Selected metrics

(in millions, except headcount)	As of or months ended Ju 2016	for the thr ne 30, 2015	As of or for the six months ended June 30, e 2016 2015 Chang				
Selected balance sheet data (period-end)	2010	2013	Change	2010	2013	CII	inge
Total assets	\$208.151	1\$201,37	73 %	\$208.15	1\$201,37	73	%
Loans:	Ψ200,13	ι φ 201,57	75 76	φ200,13	1 4 201,57	, 3	70
Loans retained	179,164	157,947	13	179,164	157,947	13	
Loans held-for-sale and loans at fair value	134	1,506	(91)	134	1,506	(91	)
Total loans	\$179,298	3\$159,453	. ,	\$179,298	3\$159,453		
Core loans		158,568			158,568		
Common equity	16,000	14,000	14	16,000	14,000	14	
Davied and leans by alient seement							
Period-end loans by client segment Middle Market Banking <sup>(a)</sup>	\$51.051	\$50,735	2	\$51,951	\$50,735	2	
Corporate Client Banking <sup>(a)</sup>	36,011	31,149	16	36,011	31,149	16	
Commercial Term Lending	66,499	58,314	14	66,499	58,314	14	
Real Estate Banking	19,233	14,231	35	19,233	14,231	35	
Other	5,604	5,024	12	5,604	5,024	12	
Total Commercial Banking loans		3,024 3\$159,453			3,024 3\$159,453		
8	,, .	- , ,		,, .	,		
Selected balance sheet data (average)							
Total assets	\$205,953	3\$198,740	)4	\$204,222	2\$197,34	13	
Loans:							
Loans retained	•	155,110	14	-	152,435	14	
Loans held-for-sale and loans at fair value	583	870	(33)	516	715	(28	)
Total loans	-	2\$155,980		-	9\$153,150		
Core loans	176,251	155,016	14	172,939	152,143	14	
Average loans by client segment							
Middle Market Banking <sup>(a)</sup>	\$51 939	\$50,438	3	\$51 248	\$49,983	3	
Corporate Client Banking <sup>(a)</sup>	35,664	29,988	19	34,728	28,834	20	
Commercial Term Lending	65,262	56,814	15	64,369	55,790	15	
Real Estate Banking	18,381	13,732		17,701	•	30	
Other	5,566	5,008			4,940		
Total Commercial Banking loans	*				9\$153,150		%
	, -, -,	- + ;	,	, -, -, - ,,	, , ,		
Client deposits and other third-party liabilities	170,717	197,004	(13)	171,898	203,489	(16	)
Common equity	16,000	14,000	14	16,000	14,000	14	
Handanus	0.127	7.560	7 01	0.107	7.560	7	01
Headcount	8,127	7,568	/ %	8,127	/,508	′/ • D - :	% 1:

<sup>(</sup>a) Effective in the second quarter of 2016, certain clients were transferred from Middle Market Banking to Corporate Client Banking. Prior period amounts were revised to conform with the current period presentation.

		the three				
		30,			0,	
		*			*	
\$60	\$(4)	NM	\$66	\$7	NM	
1,258	384	228	1,258	384	228	
	14	(100)		14	(100)	
1,258	398	216	1,258	398	216	
1	5	(80)	1	5	(80)	
1,259	403	212	1,259	403	212	
3,041	2,705	12	3,041	2,705	12	
226	163	39	226	163	39	
3,267	2,868	14 %	3,267	2,868	14 %	
0.14%	6(0.0)	D	0.08%	0.0%		
1.70	1.71		1.70	1.71		
242	704		242	704		
0.70	0.25		0.70	0.25		
	month ended 2016 \$60  1,258  1,258  1,259  3,041 226 3,267 0.14% 1.70 242	months ended June 3 2016 2015 \$60 \$(4)  1,258 384 — 14 1,258 398 1 5 1,259 403  3,041 2,705 226 163 3,267 2,868 0.14% (0.0)% 1.70 1.71 242 704	months ended June 30, 2016 2015 Change \$60 \$(4) NM  1,258 384 228 — 14 (100) 1,258 398 216 1 5 (80) 1,259 403 212  3,041 2,705 12 226 163 39 3,267 2,868 14 % 0.14% (0.0)% 1.70 1.71 242 704	months month ended June 30, ended 2016 2015 Change 2016  \$60 \$(4) NM \$66   1,258 384 228 1,258 — 14 (100) — 1,258 398 216 1,258 1 5 (80) 1 1,259 403 212 1,259  3,041 2,705 12 3,041 226 163 39 226 3,267 2,868 14 % 3,267 0.14% (0.0)% 0.08% 1.70 1.71 1.70 242 704 242	ended June 30, ended June 30, 2016 2015 Change 2016 2015  \$60 \$(4) NM \$66 \$7   1,258 384 228 1,258 384  — 14 (100) — 14  1,258 398 216 1,258 398  1 5 (80) 1 5  1,259 403 212 1,259 403  3,041 2,705 12 3,041 2,705 226 163 39 226 163 3,267 2,868 14 % 3,267 2,868 0.14% (0.0)% 0.08% 0.0% 1.70 1.71 1.70 1.71 242 704 242 704	

<sup>(</sup>a) Allowance for loan losses of \$292 million and \$42 million was held against nonaccrual loans retained at June 30, 2016 and 2015, respectively.

<sup>(</sup>b) Loans held-for-sale and loans at fair value were excluded when calculating the net charge-off/(recovery) rate.

**ASSET** 

#### **MANAGEMENT**

For a discussion of the business profile of AM, see pages 102–104 of JPMorgan Chase's 2015 Annual Report and Line of Business Metrics on pages 175–176.

Selected income statement data

(in millions, except ratios)	Three months ended June 30,			Six mont	ths ended	d June 30,		
-	2016	2015	Change	2016	2015	Cha	inge	
Revenue								
Asset management, administration and commissions		\$2,381	(12)%		\$4,610	(11	)%	
All other income	90	163	(45)	319	318			
Noninterest revenue	2,192	2,544	(14)	4,437	4,928	(10	)	
Net interest income	747	631	18	1,474	1,252	18		
Total net revenue	2,939	3,175	(7)	5,911	6,180	(4	)	
Provision for credit losses	(8)	_	NM	5	4	25		
Noninterest expense								
Compensation expense	1,249	1,299	(4)	2,490	2,588	(4	)	
Noncompensation expense	849	1,107	(23)	1,683	1,993	(16	)	
Total noninterest expense	2,098	2,406	(13)	4,173	4,581	(9	)	
Income before income tax expense	849	769	10	1,733	1,595	9		
Income tax expense	328	318	3	625	642		)	
Net income	\$521	\$451	16	\$1,108	\$953	16		
Revenue by line of business								
Global Investment Management	\$1,424	\$1,670	(15)	\$2,923	\$3,203	(9	)	
Global Wealth Management	1,515	1,505	1	2,988	2,977		,	
Total net revenue	\$2,939	\$3,175		\$5,911	\$6,180	(4	)	
Financial ratios								
Return on common equity	22 %	619 %	6	24 %	521 %	6		
Overhead ratio	71	76		71	74			
Pre-tax margin ratio:	- <del>-</del>							
Global Investment Management	30	26		31	28			
Global Wealth Management	28	22		27	24			
Asset Management	29	24		29	26			
-								

#### Quarterly results

Net income was \$521 million, an increase of 16%, reflecting lower noninterest expense predominantly offset by lower net revenue.

Net revenue was \$2.9 billion, a decrease of 7%, driven by weaker markets, lower performance fees and lower brokerage activity.

Noninterest expense was \$2.1 billion, a decrease of 13%, primarily driven by lower legal expense. The prior-year quarter also included a loss on an asset held-for-sale.

## Year-to-date results

Net income was \$1.1 billion, an increase of 16%, reflecting lower noninterest expense, largely offset by lower revenue.

Net revenue was \$5.9 billion, a decrease of 4%. Net interest income was \$1.5 billion, up 18%, driven by higher deposit spreads and loan growth. Noninterest revenue was \$4.4 billion, down 10%, driven by weaker markets and lower brokerage activity.

Noninterest expense was \$4.2 billion, a decrease of 9%, due to lower legal expense as well as a reduction of expense related to the disposal of assets.

Selected metrics					As of or for the six months ended June 30,				
(in millions, except ranking data, headcount and ratios)	2016	2015		Cha	ange	2016	2015	C	hange
% of JPM mutual fund assets rated as 4- or 5-star <sup>(a)</sup> % of JPM mutual fund assets ranked in 1 <sup>st</sup> or 2 <sup>nd</sup> quartile: <sup>(b)</sup>	52	% 54	97	ó		52	% 54	%	
1 year	54	78				54	78		
3 years	76	64				76	64		
5 years	81	78				81	78		
Selected balance sheet data (period-end)									
Total assets	\$134,380	\$134,059	9		%	\$134,380	\$134,059	_	- %
Loans <sup>(c)</sup>	113,319	109,336		4		113,319	109,336	4	
Core loans	113,319	109,336		4		113,319	109,336	4	
Deposits	148,967	141,179		6		148,967	141,179	6	
Common equity	9,000	9,000		_		9,000	9,000	_	-
Selected balance sheet data (average)									
Total assets	\$131,529	\$130,548	8	1		\$130,659	\$128,424	2	
Loans	111,704	107,250		4		111,101	105,279	6	
Core loans	111,704	107,250		4		111,101	105,279	6	
Deposits	151,214	152,563		(1	)	150,915	155,386	(3	)
Common equity	9,000	9,000		_	Í	9,000	9,000	_	-
Headcount	20,897	20,237		3		20,897	20,237	3	
Number of client advisors	2,622	2,746		(5	)	2,622	2,746	(5	)
Credit data and quality statistics									
Net charge-offs	\$2	\$(1	)	NN	1	\$11	\$2	45	50
Nonaccrual loans	254	209		22		254	209	22	2
Allowance for credit losses:									
Allowance for loan losses	258	273		(5	)	258	273	(5	)
Allowance for lending-related commitments	4	5		(20	)	4	5		0)
Total allowance for credit losses	262	278		(6	)%	262	278	(6	
Net charge-off rate		<b>%</b> —		`	,		<b>%</b> —	,	•
Allowance for loan losses to period-end loans	0.23	0.25				0.23	0.25		
Allowance for loan losses to nonaccrual loans	102	131				102	131		
Nonaccrual loans to period-end loans	0.22	0.19				0.22	0.19		
D 44 4 11 4 4 22 1 1 1 1 C		C 41 T I	0	41	T T T2	T1.	**	17	1

Represents the "overall star rating" derived from Morningstar for the U.S., the U.K., Luxembourg, Hong Kong and Taiwan domiciled funds; and Nomura "star rating" for Japan domiciled funds. Includes only Global Investment

Quartile ranking sourced from: Lipper for the U.S. and Taiwan domiciled funds; Morningstar for the U.K., Luxembourg and Hong Kong domiciled funds; Nomura for Japan domiciled funds and Fund Doctor for South

(c)

<sup>(</sup>a) Taiwan domiciled funds; and Nomura "star rating" for Japan domiciled funds. Includes only Global Investment Management retail open ended mutual funds that have a rating. Excludes money market funds, Undiscovered Managers Fund, and Brazil and India domiciled funds.

<sup>(</sup>b) Korea domiciled funds. Includes only Global Investment Management retail open ended mutual funds that are ranked by the aforementioned sources. Excludes money market funds, Undiscovered Managers Fund, and Brazil and India domiciled funds.

Included \$29.2 billion and \$24.0 billion of prime mortgage loans reported in the Consumer, excluding credit card, loan portfolio at June 30, 2016 and 2015, respectively.

# Client assets

36

Client assets of \$2.3 trillion and assets under management of \$1.7 trillion were down 3% and 5%, respectively, due to the effect of lower market levels, outflows from liquidity products and asset sales.

Client assets	June 30,	
(in billions)	2016 201	5 Change
Assets by asset class		C
Liquidity	\$426 \$46	6 (9 )%
Fixed income	383 357	7
Equity	342 380	(10)
Multi-asset and alternatives	542 578	(6 )
Total assets under management	1,693 1,78	31 (5 )
Custody/brokerage/administration/dep	osits 651 642	1
Total client assets	\$2,344\$2,4	423(3 )
Memo:		
Alternatives client assets <sup>(a)</sup>	\$151 \$17	3 (13)
Assets by client segment		
Private Banking	\$425 \$45	2 (6 )
Institutional	811 830	(2)
Retail	457 499	(8 )
Total assets under management	\$1,693\$1,7	781(5)
Private Banking	\$1,058\$1,0	080(2 )
Institutional	827 838	(1 )
Retail	459 505	(9 )
Total client assets	\$2,344\$2,4	423(3 )%
(a) Represents assets under manageme	nt, as well as clie	ent balances in brokerage accounts.
Client assets (continued)	Three months	Six months
	ended June 30,	ended June 30,
(in billions)	2016 2015	2016 2015
Assets under management rollforward		
Beginning balance	\$1,676 \$1,759	\$1,723 \$1,744
Net asset flows:		
Liquidity	4 6	(23 )5
Fixed income	10 3	21 5
Equity	(5)	) (10 )3
Multi-asset and alternatives	(2) 11	4 21
Market/performance/other impacts	10 3	(22 )3
Ending balance, June 30	\$1,693 \$1,781	\$1,693 \$1,781
Client assets rollforward		
Beginning balance	\$2,323 \$2,405	\$ \$2,350 \$2,387
Net asset flows	2 16	(5) 33
Market/performance/other impacts	19 2	(1) 3
Ending balance, June 30	\$2,344 \$2,423	\$2,344 \$2,423

International metrics	As of or for the three months			ree	months			X
		June 30				June 30		
(in billions, except where otherwise noted)	2016	2015	Cha	ange	2016	2015	Cha	ange
Total net revenue								
(in millions) <sup>(a)</sup>								
Europe/Middle East/Africa	\$463	\$524	(12	)%	\$894	\$995	(10	)%
Asia/Pacific	267	302	(12	)	522	588	(11	)
Latin America/Caribbean	186	211	(12	)	358	408	(12	)
Total international net revenue	916	1,037	(12	)	1,774	1,991	(11	)
North America	2,023	2,138	(5	)	4,137	4,189	(1	)
Total net revenue	\$2,939	9\$3,175	5(7	)	\$5,91	1\$6,180	)(4	)
Assets under management								
Europe/Middle East/Africa	\$293	\$315	(7	)	\$293	\$315	(7	)
Asia/Pacific	124	132	(6	)	124	132	(6	)
Latin America/Caribbean	46	47	(2	)	46	47	(2	)
Total international assets under management	463	494	(6	)	463	494	(6	)
North America		1,287	(4	)	1,230	1,287	(4	)
Total assets under management	\$1,693	3\$1,781	1 (5	)	\$1,693	3\$1,78	1 (5	)
C			`		,		`	
Client assets								
Europe/Middle East/Africa	\$342	\$366	(7	)	\$342	\$366	(7	)
Asia/Pacific	176	183	(4	)	176	183	(4	)
Latin America/Caribbean	115	114	1		115	114	1	
Total international client assets	633	663	(5	)	633	663	(5	)
North America	1,711	1,760		)	1,711	1,760	(3	)
Total client assets		1\$2,423	•	_			`	)%
(a) Regional revenue is based on the domicile	-	-	`	,	. ,	. ,		,

CORPORATE
For a discussion of Corporate, see pages 105–106 of JPMorgan Chase's 2015 Annual Report.
Selected income statement data

	As of or for the three months			As of or for the six months							
	ended Ju	ne 30,				ended June 30,					
(in millions, except headcount)	2016	2015		Chang	e	2016		2015		Cha	nge
Revenue											
Principal transactions	\$29	\$67		(57	)%	\$126		\$167		(25	)%
Securities gains	20	40		(50	)	71		93		(24	)
All other income/(loss)	122	(7	)	NM		243		(120	)	NM	L
Noninterest revenue	171	100		71		440		140		214	
Net interest income	(329	)(221	)	(49	)	(542	)	(474	)	(14	)
Total net revenue <sup>(a)</sup>	(158	)(121	)	(31	)	(102	)	(334	)	69	
Provision for credit losses	(1	)1		NM		(3	)	(4	)	25	
Noninterest expense(b)	(273	)44		NM		(120	)	196		NM	[
Income/(loss) before income tax expense/(benefit)	116	(166	)	NM		21		(526	)	NM	L
Income tax expense/(benefit)	282	(606	)	NM		219		(1,024	)	NM	L
Net income/(loss)	\$(166	)\$440		NM		\$(198	)	\$498		NM	L
Total net revenue											
Treasury and CIO	(226	)(163	)	(39	)	(320	)	(541	)	41	
Other Corporate	68	42		62		218		207		5	
Total net revenue	\$(158	)\$(121	)	(31	)	\$(102	)	\$(334	)	69	
Net income/(loss)											
Treasury and CIO	(199	)(112	)	(78	)	(310	)	(333	)	7	
Other Corporate	33	552		(94	)	112		831		(87	)
Total net income/(loss)	\$(166	)\$440		NM		\$(198	)	\$498		NM	L
Selected balance sheet data (period-end)											
Total assets	\$778,359	\$821,736	5	(5	)	\$778,359	)	\$821,736		(5	)
Loans	1,862	2,480		(25	)	1,862		2,480		(25	)
Core loans(c)	1,857	2,474		(25	)	1,857		2,474		(25	)
Headcount	30,402	27,985		9	%	30,402		27,985		9	%

Included tax-equivalent adjustments, predominantly due to tax-exempt income from municipal bond investments of \$227 million and \$202 million for the three months ended June 30, 2016 and 2015, respectively, and \$445 million and \$405 million for the six months ended June 30, 2016 and 2015, respectively.

Included legal expense/(benefit) of \$(467) million and \$18 million for the three months ended June 30, 2016 and (b)2015, respectively, and \$(465) million and \$323 million for the six months ended June 30, 2016 and 2015, respectively.

(c) Average core loans were \$2.0 billion and \$2.6 billion for the three months ended June 30, 2016 and 2015, respectively, and \$2.0 billion and \$2.8 billion for the six months ended June 30, 2016 and 2015, respectively. Quarterly results

Net loss was \$166 million, compared with net income of \$440 million in the prior year. The current quarter included a net legal benefit substantially offset by higher income tax expense in the current period from tax audits, compared with higher income tax benefits in the prior year from tax audits. Net revenue was a loss of \$158 million, compared to a loss of \$121 million in the prior year. Noninterest expense was a benefit of \$273 million, down \$317 million, driven by a net legal benefit in the current quarter.

Year-to-date results

Net loss was \$198 million, compared with net income of \$498 million in the prior year. The higher income tax expense in the current period from tax audits, compared with higher income tax benefits in the prior year from tax audits, was partially offset by lower expense resulting from a net legal benefit. Net revenue was a loss of \$102 million, compared to a loss of \$334 million in the prior year which included a \$173 million pre-tax loss in Treasury & CIO, primarily related to the accelerated amortization of cash flow hedges associated with the exit of certain non-operational deposits. Noninterest expense was a benefit of \$120 million, a decrease of \$316 million, largely due to a net legal benefit in the current year.

#### Treasury and CIO overview

For a discussion of Treasury and CIO, see page 106 of the Firm's 2015 Annual Report.

At June 30, 2016, the average credit rating of the Treasury and CIO investment securities comprising the portfolio in the table below was AA+ (based upon external ratings where available and, where not available, based primarily upon internal ratings that correspond to ratings as defined by S&P and Moody's). During the second quarter of 2016, the Firm transferred commercial mortgage-backed securities and obligations of U.S. states and municipalities with a fair value of \$7.5 billion from available-for-sale ("AFS") to held-to-maturity ("HTM"). These securities were transferred at fair

value. The transfers reflect the Firm's intent to hold the securities to maturity in order to reduce the impact of price volatility on AOCI.

See Note 11 for further information on the Firm's investment securities portfolio.

For further information on liquidity and funding risk, see Liquidity Risk Management on pages 70–74. For information on interest rate, foreign exchange and other risks, Treasury and CIO value-at-risk ("VaR") and the Firm's earnings-at-risk, see Market Risk Management on pages 58–61.

#### Selected income statement and balance sheet data

	As of or for the months		As of or for the six months				
	ended June 30	),	ended June 30,				
(in millions)	20162015	Change	20162015	Change			
Securities gains	\$20 \$ 40	(50)%	\$71 \$ 93	(24)%			
Investment securities portfolio (average) <sup>(a)</sup>	278,9622,954	(14)	281,23028,293	(14)			
Investment securities portfolio (period-end)(b)	275,536124,048	(12)	275,536124,048	(12)			
Mortgage loans (average)	1,85&,599	(29)	1,9322,694	(28)			
Mortgage loans (period-end)	1,79&,455	(27)	1,79&,455	(27)			

Average investment securities included HTM balances of \$53.4 billion and \$50.7 billion for the three months (a) ended June 30, 2016 and 2015, respectively, and \$50.9 billion and \$50.0 billion for the six months ended June 30, 2016 and 2015, respectively.

(b) Period-end investment securities included HTM balances of \$53.8\$ billion and \$51.6\$ billion at June 30, 2016 and 2015, respectively.

Private equity portfolio information(a)

(a) For more information on the Firm's methodologies regarding the valuation of the private equity portfolio, see Note 3 of JPMorgan Chase's 2015 Annual Report.

#### **ENTERPRISE-WIDE**

**RISK** 

#### **MANAGEMENT**

Risk is an inherent part of JPMorgan Chase's business activities. When the Firm extends a consumer or wholesale loan, advises customers on their investment decisions, makes markets in securities, or offers other products or services, the Firm takes on some degree of risk. The Firm's overall objective is to manage its businesses, and the associated risks, in a manner that balances serving the interests of its clients, customers and investors and protects the safety and soundness of the Firm.

Firmwide Risk Management is overseen and managed on an enterprise-wide basis. The Firm's approach to risk management covers a broad spectrum of risk areas, such as credit, market, liquidity, model, structural interest rate, principal, country, operational, compliance, legal, capital and reputation risk, with controls and governance established for each area, as appropriate.

The Firm believes that effective risk management requires:

Acceptance of responsibility, including identification and escalation of risk issues, by all individuals within the Firm; Ownership of risk management within each of the lines of business and corporate functions; and Firmwide structures for risk governance.

The Firm's Operating Committee, which consists of the Firm's Chief Executive Officer ("CEO"), Chief Risk Officer ("CRO") and other senior executives, is responsible for developing and executing the Firm's risk management framework. The framework is intended to provide controls and ongoing management of key risks inherent in the Firm's business activities and create a culture of transparency, awareness and personal responsibility through reporting, collaboration, discussion, escalation and sharing of information. The Operating Committee is responsible and accountable to the Firm's Board of Directors.

The Firm strives for continual improvement through efforts to enhance controls, ongoing employee training and development, talent retention, and other measures. The Firm follows a disciplined and balanced compensation framework with strong internal governance and independent Board oversight. The impact of risk and control issues are carefully considered in the Firm's performance evaluation and incentive compensation processes. The Firm is also engaged in a number of activities focused on conduct risk and in regularly evaluating its culture with respect to its business principles.

The following provides an index of key risk management disclosures. For further information on these disclosures, refer to the page references noted below in both this Form 10-Q and JPMorgan Chase's 2015 Annual Report.

Risk disclosure	Form 10-Q page reference	Annual Report page reference
Enterprise-Wide Risk Management	40-74	107–164
Risk governance		108–111
Credit Risk Management	41-57	112–132
Credit Portfolio		114
Consumer Credit Portfolio	42-47	115–121
Wholesale Credit Portfolio	48-54	122–129
Allowance For Credit Losses	55-57	130–132
Market Risk Management	58-61	133–139
Risk identification and classification		133
Value-at-risk	58-60	135–137
Economic-value stress testing		137–138
Earnings-at-risk	61	138–139
Country Risk Management	62	140–141
Model Risk Management		142
Principal Risk Management		143
Operational Risk Management		144–146

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	145-146					
Legal Risk Management						
Compliance Risk Management						
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63-69	149–158					
70-74	159–164					
70	160					
71-73	160-163					
73-74	164					
	70-74 70 71-73					

# CREDIT RISK MANAGEMENT

Credit risk is the risk of loss arising from the default of a customer, client or counterparty. The Firm provides credit to a variety of customers, ranging from large corporate and institutional clients to individual consumers and small businesses. For a further discussion of the Firm's Credit Risk Management framework and organization, and the identification, monitoring and management of credit risks, see Credit Risk Management on pages 112–132 of JPMorgan Chase's 2015 Annual Report.

In the following tables, reported loans include loans retained (i.e., held-for-investment); loans held-for-sale (which are carried at the lower of cost or fair value, with valuation changes recorded in noninterest revenue); and certain loans accounted for at fair value. In addition, the Firm records certain loans accounted for at fair value in trading assets. For further information regarding these loans, see Notes 3 and 4. For additional information on the Firm's loans, lending-related commitments and derivative receivables, including the Firm's accounting policies, see Notes 13, 21, and 5, respectively.

For further information regarding the credit risk inherent in the Firm's cash placed with banks, see Wholesale credit exposure – industry exposures on pages 50–52; for information regarding the credit risk inherent in the Firm's investment securities portfolio, see Note 11 of this Form 10-Q, and Note 12 of JPMorgan Chase's 2015 Annual Report; and for information regarding the credit risk inherent in the securities financing portfolio, see Note 12 of this Form 10-Q, and Note 13 of JPMorgan Chase's 2015 Annual Report.

#### Total credit portfolio

		Credit expo	sure	Nonperforming(b)(c)		
(in millions)		Jun 30,	Dec 31,	Jun 30,	Dec 31,	
(III IIIIIIOIIS)		2016	2015	2016	2015	
Loans retained		\$866,731	\$832,792	\$ 7,178	\$ 6,303	
Loans held-for-sale		4,221	1,646		101	
Loans at fair value		1,852	2,861	7	25	
Total loans – reported		872,804	837,299	7,185	6,429	
Derivative receivables		78,446	59,677	220	204	
Receivables from customers and other		14,426	13,497		_	
Total credit-related assets		965,676	910,473	7,405	6,633	
Assets acquired in loan satisfactions						
Real estate owned		NA	NA	305	347	
Other		NA	NA	47	54	
Total assets acquired in loan satisfactions		NA	NA	352	401	
Total assets		965,676	910,473	7,757	7,034	
Lending-related commitments		955,474	940,395	460	193	
Total credit portfolio		\$1,921,150	\$1,850,868	\$ 8,217	\$ 7,227	
Credit derivatives used		\$(23,185	)\$(20,681)	\$ <i>-</i>	\$ (9	`
in credit portfolio management activities <sup>(a)</sup>		$\Phi(23,163)$	)\$(20,001 )	φ —	ψ ( 🤊	,
Liquid securities and other cash collateral held against deriv	atives	(23,006	)(16,580 )	NA	NA	
(in millions,	Three	months	Six months			
except ratios)	ended	June 30,	ended June 3	30,		
except ratios)	2016	2015 2016 2		15		
Net charge-offs	\$1,18	1 \$1,007	\$2,291 \$2	,059		
Average retained loans						
Loans – reported	855,62	22 765,730	846,036 75	7,926		
Loans – reported, excluding residential real estate PCI loans	816,57	72 721,219	806,314 71	2,693		
Net charge-off rates						
Loans – reported	0.56	%0.53 %	0.54 %0.5	55 %		

c : (b)(c)

Loans – reported, excluding PCI

0.58

0.56

0.57 0.58

- Represents the net notional amount of protection purchased and sold through credit derivatives used to manage (a) both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. For additional information, see Credit derivatives on page 54 and Note 5.
- (b) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as they are all performing. At June 30, 2016, and December 31, 2015, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of \$5.2 billion and \$6.3 billion, respectively, that are 90 or more days past due; (2) student loans insured by U.S. government agencies under the FFELP of \$252 million and \$290 million, respectively, that
- (c) are 90 or more days past due; and (3) real estate owned ("REO") insured by U.S. government agencies of \$355 million and \$343 million, respectively. These amounts have been excluded based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance issued by the Federal Financial Institutions Examination Council ("FFIEC").

### **CONSUMER**

#### **CREDIT**

## **PORTFOLIO**

The Firm's consumer portfolio consists primarily of residential real estate loans, credit card loans, auto loans, business banking loans and student loans, and associated lending-related commitments. The Firm's focus is on serving the prime segment of the consumer credit market. For

further information on consumer loans, see Note 13 of this Form 10-Q and Consumer Credit Portfolio on pages 115–121 and Note 14 of JPMorgan Chase's 2015 Annual Report. For further information on lending-related commitments, see note 21 of this Form 10-Q.

The following table presents consumer credit-related information with respect to the credit portfolio held by CCB, prime mortgage and home equity loans held by AM, and prime mortgage loans held by Corporate.

Consumer credit nortfolio					Three 30,	months	ended J	fune	Six months ended June 30,					
(in millions,	Credit exposure			Nonaccrual loans <sup>(h)(i)</sup>		Net charge-offs <sup>(j)</sup>		Average annual net charge-off rate <sup>(j)(k)</sup>		Net charge-offs <sup>(j)</sup>		Average annual net charge-off rate <sup>(j)(k)</sup>		
except ratios)	Jun 30, 2016		Dec 31, 2015		Jun 30 2016	Dec 31, 2015	'2016	2015	2016	2015	2016	2015	2016	2015
Consumer, excluding credit card Loans, excluding PCI loans and loans held-for-sale														
Home equity	\$42,371		\$45,559		\$2,012	22,191	\$36	71	0.34%	0.57%	\$95	\$162	0.43%	0.64%
Residential mortgage	184,704		166,239		2,365	2,503	3	12	0.01	0.04	3	27		0.04
Auto <sup>(a)</sup>	64,056		60,255		208	116	46	32	0.29	0.23	113	83	0.36	0.30
Business banking <sup>(b)</sup>	22,047		21,208		290	263	53	68	0.98	1.34	109	127	1.02	1.26
Student and other	9,512		10,096		210	242	29	43	1.21	1.62	67	91	1.38	1.70
Total loans, excluding PCI loans and loans held-for-sale	322,690		303,357		5,085	5,315	167	226	0.21	0.34	387	490	0.25	0.38
Loans – PCI Home equity	14,000		14,989		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Prime mortgage	•		8,893		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Subprime mortgage	3,089		3,263		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Option ARMs <sup>(c)</sup> Total loans – PO			13,853 40,998		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Total loans –	361,050		344,355		5,085		167	NA 226	0.19	0.29	NA 387	NA 490	NA 0.22	0.32
retained	255	(g)	466	(g)		98		_				_		

Loans held-for-sale												
Total consumer, excluding credit card loans		344,821	5,085	5,413	167	226	0.19	0.29	387	490	0.22	0.32
Lending-related commitments <sup>(d)</sup> Receivables	59,224	58,478										
from customers <sup>(e)</sup>	138	125										
Total consumer exposure, excluding credit card	420,667	403,424										
Credit card												
Loans retained(f)	131,507	131,387			860	800	2.70	2.61	1,690	1,589	2.66	2.61
Loans held-for-sale	84	76	_	_	_	_	_	_	_	_	_	_
Total credit card loans	<sup>1</sup> 131,591	131,463	_	_	860	800	2.70	2.61	1,690	1,589	2.66	2.61
Lending-related commitments <sup>(d)</sup>	539,105	515,518										
Total credit card exposure	<sup>1</sup> 670,696	646,981										
Total consumer credit portfolio	\$1,091,363	\$1,050,405	\$5,085	5\$5,413	\$1,027	7\$1,026	0.85%	%0.95%	\$2,077	7\$2,079	0.87%	60.98%
Memo: Total												
consumer credit portfolio, excluding PCI	\$1,053,003	\$1,009,407	\$5,085	5\$5,413	\$1,027	7\$1,026	0.92%	61.06%	\$2,077	7\$2,079	0.95%	61.10%

- (a) At June 30, 2016, and December 31, 2015, excluded operating lease assets of \$10.9 billion and \$9.2 billion, respectively.
- (b) Predominantly includes Business Banking loans as well as deposit overdrafts.
- At June 30, 2016, and December 31, 2015, approximately 66% and 64% of the PCI option adjustable rate mortgage ("ARMs") portfolio has been modified into fixed-rate, fully amortizing loans, respectively. Credit card and home equity lending-related commitments represent the total available lines of credit for these
- products. The Firm has not experienced, and does not anticipate, that all available lines of credit would be used at the same time. For credit card and home equity commitments (if certain conditions are met), the Firm can reduce or cancel these lines of credit by providing the borrower notice or, in some cases as permitted by law, without notice.
- Receivables from customers represent margin loans to retail brokerage customers, and are included in accrued (e). interest and accounts receivable on the Consolidated balance sheets.
- Includes accrued interest and fees net of an allowance for the uncollectible portion of accrued interest and fee income.
- (g) Predominantly represents prime mortgage loans held-for-sale.
  - At June 30, 2016, and December 31, 2015, nonaccrual loans excluded loans 90 or more days past due as follows: (1) mortgage loans insured by U.S. government agencies of \$5.2 billion and \$6.3 billion, respectively; and (2)
- (h) student loans insured by U.S. government agencies under the FFELP of \$252 million and \$290 million, respectively. These amounts have been excluded from nonaccrual loans based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance issued by the FFIEC.
- (i) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as they are all performing.

Net charge-offs and the net charge-off rates excluded write-offs in the PCI portfolio of \$41 million and \$55 million for the three months ended June 30, 2016 and 2015 respectively, and \$88 million and \$110 million for the six months ended June 30, 2016 and 2015, respectively. These write-offs decreased the allowance for loan losses for PCI loans. See Allowance for Credit Losses on pages 55–57 for further details.

Average consumer loans held-for-sale were \$354 million and \$2.1 billion for the three months ended June 30, 2016 (k) and 2015, respectively, and \$389 million and \$2.5 billion for the six months ended June 30, 2016 and 2015, respectively. These amounts were excluded when calculating net charge-off rates.

Consumer, excluding credit card

Portfolio analysis

Consumer loan balances increased during the six months ended June 30, 2016, predominantly due to originations of high-quality prime mortgage and auto loans that have been retained on the balance sheet, partially offset by paydowns and the charge-off or liquidation of delinquent loans. Credit performance has continued to improve across most portfolios as the economy strengthened and home prices increased.

PCI loans are excluded from the following discussions of individual loan products and are addressed separately below. For further information about the Firm's consumer portfolio, including information about delinquencies, loan modifications and other credit quality indicators, see

Note 13.

Home equity: The home equity portfolio declined from the 2015 year-end primarily reflecting loan paydowns and charge-offs. Both early-stage and late-stage delinquencies showed improvement from December 31, 2015. Nonaccrual loans decreased from December 31, 2015 primarily as a result of loss mitigation activities. Net charge-offs for the three and six months ended June 30, 2016, declined when compared with the same periods of the prior year as a result of improvement in home prices and delinquencies.

At June 30, 2016, approximately 85% of the Firm's home equity portfolio consists of home equity lines of credit ("HELOCs") and the remainder consists of home equity loans ("HELOANs"). For further information on the Firm's home equity portfolio, see Note 13 of this Form 10-Q and Consumer Credit Portfolio on pages 115–121 of JPMorgan Chase's 2015 Annual Report.

The unpaid principal balance of HELOCs outstanding was \$38 billion at June 30, 2016. Of such amounts, approximately:

\$13 billion have recast from interest-only to fully amortizing payments or have been modified,

\$18 billion are scheduled to recast from interest-only to fully amortizing payments in future periods, and

\$7 billion are interest-only balloon HELOCs, which primarily mature after 2030.

The following chart illustrates the payment recast composition of the approximately \$25 billion of HELOCs scheduled to recast in the future, based upon their current contractual terms.

HELOCs scheduled to recast

(at June 30, 2016)

The Firm has considered this payment recast risk in its allowance for loan losses based upon the estimated amount of payment shock (i.e., the excess of the fully-amortizing payment over the interest-only payment in effect prior to recast) expected to occur at the payment recast date, along with the corresponding estimated probability of default and loss severity assumptions. As part of its allowance estimate, the Firm also expects, based on observed activity in recent years, that approximately 25% of the unpaid principal balance of HELOCs scheduled to recast will voluntarily pre-pay prior to or after the recast. The HELOCs that have previously recast to fully amortizing payments generally have higher delinquency rates than the HELOCs within the revolving period, primarily as a result of the payment shock at the time of recast. Certain other factors, such as future developments in both unemployment rates and home prices, could also have a significant impact on the performance of these loans.

The Firm manages the risk of HELOCs during their revolving period by closing or reducing the undrawn line to the extent permitted by law when borrowers are exhibiting a material deterioration in their credit risk profile. The Firm will continue to evaluate both the near-term and longer-term recast risks inherent in its HELOC portfolio to ensure that changes in the Firm's estimate of incurred losses are appropriately considered in the allowance for loan losses and that the Firm's account management practices are appropriate given the portfolio's risk profile.

High-risk seconds are junior lien loans where the borrower has a senior lien loan that is either delinquent or has been modified. Such loans are considered to pose a higher risk of default than junior lien loans for which the senior lien is neither delinquent nor modified. At June 30, 2016, the Firm estimated that the unpaid principal balance of its home equity portfolio contained approximately \$1.3 billion of current junior lien loans that were considered high risk seconds, compared with \$1.4 billion at December 31, 2015. The Firm estimates the balance of its total exposure to high-risk seconds on a quarterly basis using internal data and loan level credit bureau data (which typically provides the delinquency status of the senior lien). The Firm considers the increased probability of default associated with these high-risk seconds in estimating the allowance for loan losses and classifies those loans that are subordinated to a first lien loan that is more than 90 days delinquent as nonaccrual loans. The estimated balance of these high-risk seconds may vary from quarter to quarter for reasons such as the movement of related senior liens into and out of the 30+ day delinquency bucket. The Firm continues to monitor the risks associated with these loans. For further information, see Note 13.

Residential mortgage: The residential mortgage portfolio predominantly consists of high-quality prime mortgage loans, with a small component (approximately 2%) of the residential mortgage portfolio in subprime mortgage loans. These subprime mortgage loans continue to run-off and are performing in line with expectations. The residential mortgage portfolio, including loans held-for-sale, increased from December 31, 2015 due to retained originations of high-quality prime mortgage loans partially offset by paydowns and the charge-off or liquidation of delinquent loans. Originations for the three and six months ended June 30, 2016 were primarily high-quality prime mortgage loans with fixed interest rates, and included both jumbo and conforming loans. Both early-stage and late-stage delinquencies showed improvement from December 31, 2015. Nonaccrual loans decreased from December 31, 2015 primarily as a result of loss mitigation activities. Net charge-offs for the three and six months ended June 30, 2016 remain low, reflecting continued improvement in home prices and delinquencies.

At June 30, 2016, and December 31, 2015, the Firm's residential mortgage portfolio included \$10.2 billion and \$11.1 billion, respectively, of mortgage loans insured and/or guaranteed by U.S. government agencies, of which \$7.2 billion and \$8.4 billion, respectively, were 30 days or more past due (of these past due loans, \$5.2 billion and \$6.3 billion, respectively, were 90 days or more past due). The Firm monitors its exposure to any potential unrecoverable claim payments related to government insured loans and considers this exposure in estimating the allowance for loan losses. The financial impact related to exposure for future claims of government guaranteed loans is not expected to be significant.

At both June 30, 2016, and December 31, 2015, the Firm's residential mortgage portfolio included \$17.8 billion of interest-only loans. These loans have an interest-only payment period generally followed by an adjustable-rate or fixed-rate fully amortizing payment period to maturity and are typically originated as higher-balance loans to higher-income borrowers. To date, losses on this portfolio generally have been consistent with the broader residential mortgage portfolio and the Firm's expectations. The Firm continues to monitor the risks associated with these loans. Auto: Auto loans increased compared with December 31, 2015, as new originations outpaced paydowns and payoffs. Nonaccrual loans increased compared with December 31, 2015. Net charge-offs for the three and six months ended June 30, 2016 increased compared with the same periods of the prior year as a result of higher retail auto loan balances and a moderate increase in loss severity. The auto loan portfolio predominantly consists of prime-quality credits.

Business banking: Business banking loans increased compared with December 31, 2015 due to growth in loan originations. Nonaccrual loans increased compared with December 31, 2015. Net charge-offs for the three and six months ended June 30, 2016 decreased from prior year due to continued discipline in credit underwriting. Student and other: Student and other loans decreased from December 31, 2015, due primarily to the run-off of the student loan portfolio as the Firm ceased originations of student loans during the fourth quarter of 2013. Nonaccrual loans declined from December 31, 2015 and net charge-offs for the three and six months ended June 30, 2016 declined from prior year as a result of the run-off of the student loan portfolio.

Purchased credit-impaired loans: PCI loans decreased as the portfolio continues to run off. As of June 30, 2016, approximately 12% of the option ARM PCI loans were delinquent and approximately 66% of the portfolio has been modified into fixed-rate, fully amortizing loans. Substantially all of the remaining loans are making amortizing

payments, although such payments are not necessarily fully amortizing. This latter group of loans is subject to the risk of payment shock due to future payment recast. Default rates generally increase on option ARM loans when payment recast results in a payment increase. The expected increase in default rates is considered in the Firm's quarterly impairment assessment.

The following table provides a summary of lifetime principal loss estimates included in either the nonaccretable difference or the allowance for loan losses.

Summary of PCI loans lifetime principal loss estimates

	Lifetir estima	ne loss ates <sup>(a)</sup>	LTD liquidation losses <sup>(b)</sup>				
(in billions)	Jun 30	Dec 31,	Jun 30	Dec 31,			
	2016	2015	2016	2015			
Home equity	\$14.6	\$ 14.5	\$12.8	\$ 12.7			
Prime mortgage	4.0	4.0	3.7	3.7			
Subprime mortgage	3.2	3.3	3.0	3.0			
Option ARMs	10.0	10.0	9.6	9.5			
Total	\$31.8	\$ 31.8	\$29.1	\$ 28.9			

Includes the original nonaccretable difference established in purchase accounting of \$30.5 billion for principal losses plus additional principal losses recognized subsequent to acquisition through the provision and allowance for loan losses. The remaining nonaccretable difference for principal losses was \$1.3 billion and \$1.5 billion at June 30, 2016, and December 31, 2015, respectively.

(b) Life-to-date ("LTD") liquidation losses represent both realization of loss upon loan resolution and any principal forgiven upon modification.

Current estimated LTVs of residential real estate loans

The current estimated average loan-to-value ("LTV") ratio for residential real estate loans retained, excluding mortgage loans insured by U.S. government agencies and PCI loans, was 58% at June 30, 2016, compared with 59% at December 31, 2015. The current estimated average LTV ratio for residential real estate PCI loans, based on the unpaid principal balances, was 66% at June 30, 2016, compared with 69% at December 31, 2015.

Average LTV ratios have declined consistent with recent improvements in home prices. For further information on current estimated LTVs on residential real estate loans, see Note 13.

Geographic composition of residential real estate loans

For information on the geographic composition of the Firm's residential real estate loans, see Note 13.

Loan modification activities – residential real estate loans

The performance of modified loans generally differs by product type due to differences in both the credit quality and the types of modifications provided. The performance of modifications completed under both the U.S. Government's Home Affordable Modification Program ("HAMP") and the Firm's proprietary modification programs (primarily the Firm's modification program that was modeled after HAMP), as measured through cumulative redefault rates, was not materially different from December 31, 2015. For further information on the Firm's cumulative redefault rates see Consumer Credit Portfolio on pages 115–121 of JPMorgan Chase's 2015 Annual Report.

Certain loans that were modified under HAMP and the Firm's proprietary modification programs have interest rate reset provisions ("step-rate modifications"). Interest rates on these loans generally began to increase commencing in 2014 by 1% per year, and will continue to do so, until the rate reaches a specified cap, typically at a prevailing market interest rate for a fixed-rate loan as of the modification date. The carrying value of non-PCI loans modified in step-rate modifications was \$4 billion at June 30, 2016. The unpaid principal balance of PCI loans modified in step-rate modifications was \$9 billion at June 30, 2016. The Firm continues to monitor this risk exposure and the impact of these potential interest rate increases is considered in the Firm's allowance for loan losses.

The following table presents information as of June 30, 2016, and December 31, 2015, relating to modified retained residential real estate loans for which concessions have been granted to borrowers experiencing financial difficulty. For further information on modifications for the three and six months ended June 30, 2016 and 2015, see Note 13. Modified residential real estate loans

June 30, 2016 December 31, 2015

(in millions)

	Retaine loans	dNon-accrual retained loans(d)	Retaine loans	dNon-accrual retained loans <sup>(d)</sup>
Modified residential real estate loans, excluding				
PCI loans <sup>(a)(b)</sup>				
Home equity	\$2,304	1,144	\$2,358	1,220
Residential mortgage	6,377	1,846	6,690	1,957
Total modified residential real estate loans, excluding PCI loans	\$8,681	\$ 2,990	\$9,048	\$ 3,177
Modified PCI loans(c)				
Home equity	\$2,493	NA	\$2,526	NA
Prime mortgage	5,372	NA	5,686	NA
Subprime mortgage	3,078	NA	3,242	NA
Option ARMs	9,859	NA	10,427	NA
Total modified PCI loans	\$20,802	2NA	\$21,88	l NA

- (a) Amounts represent the carrying value of modified residential real estate loans.
  - At June 30, 2016, and December 31, 2015, \$3.7 billion and \$3.8 billion, respectively, of loans modified subsequent to repurchase from Ginnie Mae in accordance with the standards of the appropriate government agency (i.e., FHA,
- (b) VA, RHS) are not included in the table above. When such loans perform subsequent to modification in accordance with Ginnie Mae guidelines, they are generally sold back into Ginnie Mae loan pools. Modified loans that do not re-perform become subject to foreclosure. For additional information about sales
- of loans in securitization transactions with Ginnie Mae, see Note 15.
- (c) Amounts represent the unpaid principal balance of modified PCI loans.
  - As of June 30, 2016, and December 31, 2015, nonaccrual loans included \$2.4 billion and \$2.5 billion, respectively,
- (d) of troubled debt restructurings ("TDRs") for which the borrowers were less than 90 days past due. For additional information about loans modified in a TDR that are on nonaccrual status, see Note 13.

#### Nonperforming assets

The following table presents information as of June 30, 2016, and December 31, 2015, about consumer, excluding credit card, nonperforming assets.

Nonperforming assets(a)

(in millions)	June 30,	December 31,
(in millions)	2016	2015
Nonaccrual loans(b)		
Residential real estate	\$4,377	\$ 4,792
Other consumer	708	621
Total nonaccrual loans	5,085	5,413
Assets acquired in loan satisfactions		
Real estate owned	231	277
Other	45	48
Total assets acquired in loan satisfactions	276	325
Total nonperforming assets	\$5,361	\$ 5,738

At June 30, 2016, and December 31, 2015, nonperforming assets excluded: (1) mortgage loans insured by U.S. government agencies of \$5.2 billion and \$6.3 billion, respectively, that are 90 or more days past due; (2) student

- (a) loans insured by U.S. government agencies under the FFELP of \$252 million and \$290 million, respectively, that are 90 or more days past due; and (3) real estate owned insured by U.S. government agencies of \$355 million and \$343 million, respectively. These amounts have been excluded based upon the government guarantee.
- Excludes PCI loans which are accounted for on a pool basis. Since each pool is accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows, the past-due status of the pools, or that
- (b) of individual loans within the pools, is not meaningful. Because the Firm is recognizing interest income on each pool of loans, they are all considered to be performing.

Nonaccrual loans in the residential real estate portfolio decreased to \$4.4 billion at June 30, 2016 from \$4.8 billion at December 31, 2015, of which 30% and 31% were greater than 150 days past due, respectively. In the aggregate, the unpaid principal balance of residential real estate loans greater than 150 days past due was charged down by approximately 43% and 44% to the estimated net realizable value of the collateral at June 30, 2016, and December 31, 2015, respectively.

Active and suspended foreclosure: For information on loans that were in the process of active or suspended foreclosure, see Note 13.

2016 2015

Nonaccrual loans: The following table presents changes in consumer, excluding credit card, nonaccrual loans for the six months ended June 30, 2016 and 2015.

Nonaccrual loans

Six months ended June 30,

(in millions)	2016	2015
Beginning balance	\$5,413	\$6,509
Additions	1,802	1,805
Reductions:		
Principal payments and other <sup>(a)</sup>	730	784
Charge-offs	354	395
Returned to performing status	853	872
Foreclosures and other liquidations	193	279
Total reductions	2,130	2,330
Net additions/(reductions)	(328	)(525)
Ending balance	\$5,085	\$5,984

(a) Other reductions includes loan sales.

#### Credit Card

Total credit card loans were relatively flat from December 31, 2015. The June 30, 2016 30+ day delinquency rate decreased to 1.40% from 1.43% at December 31, 2015, and remains near record lows. For the three months ended June 30, 2016 and 2015, the net charge-off rates were 2.70% and 2.61%, respectively. For the six months ended June 30, 2016 and 2015, the net charge-off rates were 2.66% and 2.61%, respectively. The credit card portfolio continues to reflect a largely well-seasoned, rewards-based portfolio that has good U.S. geographic diversification. New originations continue to grow as a percentage of the total portfolio, in line with the Firm's credit parameters; these originations are expected to generate loss rates higher than the more seasoned portion of the portfolio, given the higher mix of near-prime accounts being originated. These near-prime accounts have net revenue rates and returns on equity that are higher than the portfolio average. For information on the geographic and FICO composition of the Firm's credit card loans, see Note 13.

#### Modifications of credit card loans

At June 30, 2016, and December 31, 2015, the Firm had \$1.3 billion and \$1.5 billion, respectively, of credit card loans outstanding that have been modified in TDRs. These balances included both credit card loans with modified payment terms and credit card loans that reverted back to their pre-modification payment terms because the cardholder did not comply with the modified payment terms. The decrease in modified credit card loans outstanding from December 31, 2015, was attributable to a reduction in new modifications as well as ongoing payments and charge-offs on previously modified credit card loans.

Consistent with the Firm's policy, all credit card loans typically remain on accrual status until charged-off. However, the Firm establishes an allowance, which is offset against loans and charged to interest income, for the estimated uncollectible portion of accrued interest and fee income.

For additional information about loan modification programs to borrowers, see Note 13.

## WHOLESALE CREDIT PORTFOLIO

The Firm's wholesale businesses are exposed to credit risk through underwriting, lending, market-making, and hedging activities with and for clients and counterparties, as well as through various operating services such as cash management and clearing activities. A portion of the loans originated or acquired by the Firm's wholesale businesses is generally retained on the balance sheet. The Firm distributes a significant percentage of the loans it originates into the market as part of its syndicated loan business and to manage portfolio concentrations and credit risk. The wholesale credit portfolio, excluding the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios, continued to be generally stable for the six months ended June 30, 2016, characterized by low levels of criticized exposure, nonaccrual loans and charge-offs. See industry discussion on pages 50–52 for further information. Growth in loans retained was driven by increased client activity, notably in Commercial Term Lending and Real Estate Banking within commercial real estate. Discipline in underwriting across all areas of lending continues to remain a key point of focus. The wholesale portfolio is actively managed, in part by conducting ongoing, in-depth reviews of client credit quality and transaction structure, inclusive of collateral where applicable; and of industry, product and client concentrations.

#### Wholesale credit portfolio

Con 1's amount				/ >
	Credit exp	osure	Nonper	forming <sup>(c)</sup>
(in millions)	Jun 30,	Dec 31,	Jun 30,	Dec 31,
(iii iiiiiiolis)	2016	2015	2016	2015
Loans retained	\$374,174	\$357,050	\$ 2,093	\$988
Loans held-for-sale	3,882	1,104		3
Loans at fair value	1,852	2,861	7	25
Loans – reported	379,908	361,015	2,100	1,016
Derivative receivables	78,446	59,677	220	204
Receivables from customers and other <sup>(a)</sup>	14,288	13,372		_
Total wholesale credit-related assets	472,642	434,064	2,320	1,220
Lending-related commitments	357,145	366,399	460	193
Total wholesale credit exposure	\$829,787	\$800,463	\$2,780	\$1,413
Credit derivatives used in credit portfolio management activities(b)	\$(23,185	)\$(20,681)	\$ <i>—</i>	\$(9)
Liquid securities and other cash collateral held against derivatives	(23,006	)(16,580 )	NA	NA

Receivables from customers and other include \$14.0 billion and \$13.3 billion of margin loans at June 30, 2016, and

- (a) December 31, 2015, respectively, to prime brokerage customers; these are classified in accrued interest and accounts receivable on the Consolidated balance sheets.
- Represents the net notional amount of protection purchased and sold through credit derivatives used to manage (b) both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge
- accounting under U.S. GAAP. For additional information, see Credit derivatives on page 54, and Note 5.
- (c) Excludes assets acquired in loan satisfactions.

The following tables present the maturity and ratings profiles of the wholesale credit portfolio as of June 30, 2016, and December 31, 2015. The ratings scale is based on the Firm's internal risk ratings, which generally correspond to the ratings as defined by S&P and Moody's. For additional information on wholesale loan portfolio risk ratings, see Note 14 of JPMorgan Chase's 2015 Annual Report.

14 of 31 Worgan Chase's 201		•	011					
Wholesale credit exposure –	-		rofile					
	Maturity p	profile <sup>(e)</sup>			Ratings pro			
June 30, 2016	Dua in 1	Due after			Investment	:-Nacionalienvestment-	grade	Total
	Due in 1	1 year	Due after	r	AAA/Aaa	BB+/Ba1 &		Total
(in millions, except ratios)	year or	through 5	5 years	Total	to	BB+/Bal &	Total	% of
(iii iiiiiiioiis, exeept radios)	less	years	o yours		BBB-/Baa.	below		IG
I concustoined	¢ 1 1 0 0 6 7	•	¢06 021	¢274 174			¢274 174	75.01
Loans retained	\$118,067	\$160,076	\$90,031		\$280,084	\$ 94,090	\$374,174	13%
Derivative receivables				78,446			78,446	
Less: Liquid securities and								
other cash collateral held				(23,006)			(23,006)	)
against derivatives								
Total derivative receivables,	1 = = 10	11 770	26.442		1.5.001	10.010	· · · ·	0.0
net of all collateral	17,749	11,578	26,113	55,440	45,221	10,219	55,440	82
Lending-related commitment	c02 002	252,253	11,990	357,145	263,740	93,405	357,145	74
Subtotal	228,718	423,907	•	•	•	•	•	75
		423,907	134,134	786,759	589,045	197,714	786,759	13
Loans held-for-sale and loans	8			5,734			5,734	
at fair value <sup>(a)</sup>				-,			-,	
Receivables from customers				14,288			14,288	
and other				14,200			14,200	
Total exposure – net of liquid	l							
securities and other cash								
collateral held against				\$806,781			\$806,781	
derivatives								
Credit derivatives used in								
credit portfolio management	\$(1.151	)\$(17.352	\$(4.682)	)\$(23,185)	\$(19.682)	\$ (3.503	\$(23,185)	85%
activities by reference entity	Ψ (1,101	) + (11,000	, 4 ( 1,002 )	)	Ψ(1>,00 <b>-</b> )	ψ (ε,ε σε )	Ψ( <b>=</b> υ,1υυ )	, 00 ,0
ratings profile <sup>(b)(c)(d)</sup>								
	Maturity p	orofile <sup>(e)</sup>			Ratings pro	ofile		
December 31, 2015	-	Due after				- <b>Mondie</b> nvestment-	grade	
, , ,	Due in 1	1 year	Due after	r	AAA/Aaa			Total
(in millions, except ratios)	year or	through 5	Due after	'Total	to	BB+/Ba1 &	Total	% of
(III IIIIIIIIIIII)	less	· ·	J years		to BBB-/Baa3	below		IG
	<b># 1 1 0 2 10</b>	years	<b>\$00.000</b>	<b># 255</b> 050	BBB-/Baa.	, oo 214	<b>4257</b> 050	<b>55</b> 64
Loans retained	\$110,348	\$155,902	\$90,800	•	\$267,736	\$ 89,314	\$357,050	15%
Derivative receivables				59,677			59,677	
Less: Liquid securities and								
other cash collateral held				(16,580)			(16,580	)
against derivatives								
Total derivative receivables,								
net of all collateral	11,399	12,836	18,862	43,097	34,773	8,324	43,097	81
	-105 514	251 042	0.042	266 200	267.022	00 477	266 200	72
Lending-related commitment		251,042	9,843	366,399	267,922	98,477	366,399	73
Subtotal	227,261	419,780	119,505	766,546	570,431	196,115	766,546	74
Loans held-for-sale and loans	8			3,965			3,965	
at fair value <sup>(a)</sup>				5,705			5,705	
Receivables from customers				13,372			13,372	
and other				133//			13.374	
and other				13,372			,	
and other				\$783,883			\$783,883	

Total exposure – net of liquid securities and other cash collateral held against derivatives

Credit derivatives used in credit portfolio management activities by reference entity ratings profile(b)(c)(d)

\$\((808\))(14,427)(5,446)(20,681)(17,754)(2,927)(20,681)(86%)

- (a) Represents loans held-for-sale, primarily related to syndicated loans and loans transferred from the retained portfolio, and loans at fair value.
- (b) These derivatives do not qualify for hedge accounting under U.S. GAAP.
- (c) The notional amounts are presented on a net basis by underlying reference entity and the ratings profile shown is based on the ratings of the reference entity on which protection has been purchased.

  Predominantly all of the credit derivatives entered into by the Firm where it has purchased protection, including
- (d) credit derivatives used in credit portfolio management activities, are executed with investment-grade counterparties.
- The maturity profile of retained loans, lending-related commitments and derivative receivables is based on the (e)remaining contractual maturity. Derivative contracts that are in a receivable position at June 30, 2016, may become payable prior to maturity based on their cash flow profile or changes in market conditions.

Wholesale credit exposure – industry exposures

The Firm focuses on the management and diversification of its industry exposures, paying particular attention to industries with actual or potential credit concerns. Exposures deemed criticized align with the U.S. banking regulators' definition of criticized exposures, which consist

of the special mention, substandard and doubtful categories. The total criticized component of the portfolio, excluding loans held-for-sale and loans at fair value, was \$21.0 billion at June 30, 2016, compared with \$14.6 billion at December 31, 2015, driven by downgrades within the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios.

Below are summaries of the Firm's exposures as of June 30, 2016, and December 31, 2015. For additional information on industry concentrations, see Note 5 of JPMorgan Chase's 2015 Annual Report.

Wholesale credit exposure		-	gan Chase	8 2013 All	пиат Керо		ed metric	es		
As of or for the Six month ended June 30, 2016	s		Noninves			30 days o more past	or Net	Credit	Liquid securities and othe cash re collatera	r
(in millions)	Credit exposure <sup>(c)</sup>	Investmen grade	t-Noncritic	. Criticized ized performi	dCriticized ngonperfor		(recove	ri <b>bo)</b> lges <sup>(f)</sup>		⁄e
Real Estate	\$125,215	\$96,714	\$27,331	\$ 947	\$ 223	\$60	\$ —	\$(105	)\$(146	)
Consumer & Retail	82,682	53,316	27,676	1,461	229	20	18	(594	)(34	)
Industrials	56,546	37,678	17,709	1,080	79	34	1	(552	)(21	)
Technology, Media & Telecommunications	55,831	32,659	21,749	1,413	10	81	3	(941	)(50	)
Healthcare	47,494	36,722	10,251	454	67	49	18	(266	)(330	)
Banks & Finance Cos	43,434	35,105	7,698	611	20	19	(1	(1,405)	)(6,007	)
Oil & Gas	39,675	18,685	10,234	9,392	1,364	1	137	(1,270	)(34	)
Utilities	31,930	26,591	4,815	387	137	3		(279	)(30	)
Asset Managers	31,655	27,061	4,554	40		55		(5	)(5,974	)
State & Municipal Govt(b)	28,417	27,707	664	6	40	17	_	(130	)(126	)
Central Govt	24,519	24,095	392	32	_	2	_	(11,226	)(4,342	)
Chemicals/Plastics	18,117	13,344	4,585	158	30	1		(54	)(3	)
Transportation	17,773	12,224	5,229	281	39	34		(96	)(229	)
Automotive	15,015	9,169	5,637	208	1	2		(496	)(6	)
Metals & Mining	13,816	5,102	7,020	1,506	188		27	(484	)(7	)
Insurance	11,655	9,882	1,646	_	127	22		(307	)(1,843	)
Financial Markets	11,466	10,552	914			_			(1,686	)
Infrastructure	•			_				_	•	,
Securities Firms	5,117	1,633	3,484	_	_			(232	)(501	)
All other <sup>(c)</sup>	149,408	131,202	17,760	227	219	924	11	(4,743	)(1,637	)
Subtotal	\$809,765	\$609,441	\$179,348	\$ 18,203	\$ 2,773	\$1,324	4\$ 214	\$(23,185	5)\$(23,006	5)
Loans held-for-sale and loans at fair value Receivables from	5,734									
customers and interests in purchased receivables	14,288									
Total <sup>(d)</sup>	\$829,787									

							Selected metrics				
As of or for the year ended			Noninve	stment-gra	ade	30 days o	or		Liquid securitie and other		
December 31, 2015						more	Net	Credit	cash		
(in millions)	Credit exposure(	Investmer <sup>e</sup> grade	<sup>nt</sup> -Noncritio	Criticized ized, performin	dCriticized n <b>g</b> onperfor	past due namb accrui loans	(recov	e-off <b>er</b> ivativ eri <b>hs</b> )dges <sup>(f)</sup>		ve	
Real Estate	\$116,857	\$88,076	\$27,087	\$ 1,463	\$ 231	\$208	\$ (14	) \$(54	)\$(47	)	
Consumer & Retail	85,460	53,647	29,659	1,947	207	18	13	(288	)(94	)	
Industrials	54,386	36,519	16,663	1,164	40	59	8	(386	)(39	)	
Technology, Media & Telecommunications	57,382	29,205	26,925	1,208	44	5	(1	) (806	)(21	)	
Healthcare	46,053	37,858	7,755	394	46	129	(7	) (24	)(245	)	
Banks & Finance Cos	43,398	35,071	7,654	610	63	17	(5	) (974	)(5,509	)	
Oil & Gas	42,077	24,379	13,158	4,263	277	22	13	(530	)(37	)	
Utilities	30,853	24,983	5,655	168	47	3		(190	)(289	)	
Asset Managers	23,815	20,214	3,570	31	_	18		(6	)(4,453	)	
State & Municipal Govt(b)	29,114	28,307	745	7	55	55	(8	) (146	)(81	)	
Central Govt	17,968	17,871	97	_	_	7		(9,359	)(2,393	)	
Chemicals/Plastics	15,232	10,910	4,017	274	31	9		(17	)—		
Transportation	19,227	13,258	5,801	167	1	15	3	(51	)(243	)	
Automotive	13,864	9,182	4,580	101	1	4	(2	) (487	)(1	)	
Metals & Mining	14,049	6,522	6,434	1,008	85	1		(449	)(4	)	
Insurance	11,889	9,812	1,958	26	93	23	-	(157	)(1,410	)	
Financial Markets Infrastructure	7,973	7,304	669		_	_	_		(167	)	
Securities Firms	4,412	1,505	2,907	_	_	3		(102	)(256	)	
All other(c)	149,117	130,488	18,095	370	164	1,015	10	(6,655	)(1,291	)	
Subtotal	\$783,126	\$585,111	\$183,429	9\$ 13,201	\$ 1,385	\$1,61	1\$ 10	\$(20,681	)\$(16,58	0)	
Loans held-for-sale and loans at fair value	3,965										
Receivables from customers and interests in purchased receivables	3 13,372										
Total <sup>(d)</sup>	\$800,463										
The industry realings pre	acontad in	tha tabla ac	of Docon	shor 21 20	015 oro box	and on	tha indu	actory ronlyin	as of the		

The industry rankings presented in the table as of December 31, 2015, are based on the industry rankings of the corresponding exposures at June 30, 2016, not actual rankings of such exposures at December 31, 2015.

(b)

In addition to the credit risk exposure to states and municipal governments (both U.S. and non-U.S.) at June 30, 2016, and December 31, 2015, noted above, the Firm held: \$9.2 billion and \$7.6 billion, respectively, of trading securities; \$32.1 billion and \$33.6 billion, respectively, of AFS securities; and \$14.5 billion and \$12.8 billion, respectively, of HTM securities, issued by U.S. state and municipal governments. For further information, see Note 3 and Note 11.

- All other includes: individuals; SPEs; holding companies; and private education and civic organizations,
- (c)representing approximately 54%, 37%, 5% and 4%, respectively, at June 30, 2016, and 54%, 37%, 5% and 4%, respectively, at December 31, 2015.
- (d) Excludes cash placed with banks of \$355.8 billion and \$351.0 billion, at June 30, 2016, and December 31, 2015, respectively, placed with various central banks, predominantly Federal Reserve Banks.
- Credit exposure is net of risk participations and excludes the benefit of credit derivatives used in credit portfolio (e) management activities held against derivative receivables or loans and liquid securities and other cash collateral held against derivative receivables.
- Represents the net notional amounts of protection purchased and sold through credit derivatives used to manage the (f) credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. The All other category includes purchased credit protection on certain credit indices.

Presented below is a discussion of certain industries to which the Firm has significant exposures and which present actual or potential credit concerns.

Oil & Gas and Natural Gas Pipelines

The following table presents Oil & Gas and Natural Gas Pipeline exposures as of June 30, 2016, and December 31, 2015.

	June 30,	2016				
	Loans					
(in millions, avant ratios)	and	Derivative	Credit	%		%
(in millions, except ratios)	Lending	- <b>1Releateid</b> vables	exposure	Investm	ent-grade	Drawn
	Commit	ments				
Exploration & Production ("E&P") and Oilfield Services	\$21,060	\$ 813	\$21,873	26	%	40 %
Other Oil & Gas <sup>(b)</sup>	16,888	913	17,801	73		30
Total Oil & Gas	37,948	1,726	39,674	47		35
Natural Gas Pipelines <sup>(c)</sup>	4,552	192	4,744	67		37
Total Oil & Gas and Natural Gas Pipelines	\$42,500	\$ 1,918	\$44,418	49		35
	Decemb	er 31, 2015				
	December Loans	er 31, 2015				
(in millions, except ratios)		er 31, 2015  Derivative	Credit	% Inves	stment-	%
(in millions, except ratios)	Loans and				stment-	% Drawn
(in millions, except ratios)	Loans and	Derivative			stment-	
(in millions, except ratios)  E&P and Oilfield Services <sup>(a)</sup>	Loans and Lending	Derivative -iletateid ables ments			stment- %	
	Loans and Lending Commits \$23,055	Derivative -iletateid ables ments	exposure	grade		Drawn
E&P and Oilfield Services <sup>(a)</sup>	Loans and Lending Commits \$23,055 17,120	Derivative -Related ables ments \$ 400	exposure \$ 23,455	grade 44		Drawn 36 %
E&P and Oilfield Services <sup>(a)</sup> Other Oil & Gas <sup>(b)</sup>	Loans and Lending Commits \$23,055 17,120	Derivative Reducidables ments \$ 400 1,502	exposure \$ 23,455 18,622	grade 44 76		Drawn 36 % 27

- (a) Noninvestment-grade exposure to E&P and Oilfield Services is largely secured.
- (b) Other Oil & Gas includes Integrated Oil & Gas companies, Midstream/Oil Pipeline companies and refineries.
- (c) Natural Gas Pipelines is reported within the Utilities industry.

Exposure to the Oil & Gas and Natural Gas Pipelines portfolios was approximately 5.4% of the Firm's total wholesale exposure as of June 30, 2016 and 5.8% as of December 31, 2015. Exposure to these industries decreased by \$1.9 billion during the six months ended June 30, 2016 to \$44.4 billion; of the \$44.4 billion, \$15.7 billion was drawn. As of June 30, 2016, approximately \$21.9 billion of the exposure was investment grade, of which \$5.7 billion was drawn, and approximately \$22.5 billion of the exposure was noninvestment-grade, of which \$10.0 billion was drawn; 25% of the exposure to the Oil & Gas and Natural Gas Pipelines industries was criticized. Secured lending, of which approximately half is reserve-based lending to the Exploration & Production sub-sector of the Oil & Gas industry, was \$13.8 billion as of June 30, 2016; 48% of the secured lending exposure was drawn. Exposure to commercial real estate, which is reported within the Real Estate industry, in certain areas of Texas, California and Colorado, that are deemed sensitive to the Oil & Gas industry, was approximately \$4 billion as of June 30, 2016. While the overall trends and sentiment have been improving, the Firm continues to actively monitor and manage its exposure to these portfolios. The Firm is also actively monitoring potential contagion effects to other related or dependent industries and geographies; however, to date, the Firm has not observed any material deterioration in these related or dependent industries and geographies in the wholesale portfolio.

Metals & Mining: Exposure to the Metals & Mining industry was approximately 1.7% and 1.8% of the Firm's total wholesale exposure as of June 30, 2016, and December 31, 2015, respectively. Exposure to the Metals & Mining industry decreased by \$233 million during the six months ended June 30, 2016 to \$13.8 billion, of which \$4.6 billion was drawn. The portfolio largely consisted of exposure in North America, and was concentrated in the Steel and

Diversified Mining sub-sectors. Approximately 37% and 46% of the exposure in the Metals & Mining portfolio was investment-grade as of June 30, 2016, and December 31, 2015, respectively.

#### Loans

In the normal course of its wholesale business, the Firm provides loans to a variety of customers, ranging from large corporate and institutional clients to high-net-worth individuals. The Firm actively manages its wholesale credit exposure. One way of managing credit risk is through secondary market sales of loans and lending-related commitments. For further discussion on loans, including information on credit quality indicators and sales of loans, see Note 13.

The following table presents the change in the nonaccrual loan portfolio for the six months ended June 30, 2016 and 2015.

Wholesale nonaccrual loan activity(a)

Six months ended June 30,

(in millions)	2016	2015
Beginning balance	\$1,016	5\$624
Additions	1,902	792
Reductions:		
Paydowns and other	419	284
Gross charge-offs	226	31
Returned to performing status	149	199
Sales	24	3
Total reductions	818	517
Net changes	1,084	275
Ending balance	\$2,100	)\$899

Loans are placed on nonaccrual status when management believes full payment of principal or interest is not (a) expected, regardless of delinquency status, or when principal or interest have been in default for a period of 90 days or more, unless the loan is both well-secured and in the process of collection.

The following table presents net charge-offs/recoveries, which are defined as gross charge-offs less recoveries, for the three and six months ended June 30, 2016 and 2015. The amounts in the table below do not include gains or losses from sales of nonaccrual loans.

Wholesale net charge-offs/(recoveries)

	Three mo	Three months ended					Six months ended			
(in millions, except ratios)	June 30,				June 30,					
	2016		2015		2016		2015			
Loans – reported										
Average loans retained	\$369,706	6	\$331,924	4	\$365,006	5	\$329,92	l		
Gross charge-offs	159		4		228		33			
Gross recoveries	(5	)	(23	)	(14	)	(53	)		
Net	154		(19	)	214		(20	)		
charge-offs/(recoveries)	134		(1)	,	217		(20	,		
Net	0.17	0%	0.02	10%	0.12	07	0.01	)%		
charge-off/(recovery) rate	0.17	/(	(0.02	) 10	0.12	/(	(0.01	) 10		

#### Lending-related commitments

The Firm uses lending-related financial instruments, such as commitments (including revolving credit facilities) and guarantees, to meet the financing needs of its customers. The contractual amounts of these financial instruments represent the maximum possible credit risk should the counterparties draw down on these commitments or the Firm fulfills its obligations under these guarantees, and the counterparties subsequently fail to perform according to the terms of these contracts.

In the Firm's view, the total contractual amount of these wholesale lending-related commitments is not representative of the Firm's likely actual future credit exposure or funding requirements. In determining the amount of credit risk exposure the Firm has to wholesale lending-related commitments, which is used as the basis for allocating credit risk capital to these commitments, the Firm has established a "loan-equivalent" amount for each commitment; this amount

represents the portion of the unused commitment or other contingent exposure that is expected, based on average portfolio historical experience, to become drawn upon in an event of a default by an obligor. The loan-equivalent amount of the Firm's wholesale lending-related commitments was \$212.7 billion and \$212.4 billion as of June 30, 2016, and December 31, 2015, respectively.

Derivative contracts

In the normal course of business, the Firm uses derivative instruments predominantly for market-making activities. Derivatives enable clients to manage exposures to fluctuations in interest rates, currencies and other markets. The Firm also uses derivative instruments to manage its own credit and other market risk exposure. For further discussion of derivative contracts, see Note 5.

The following table summarizes the net derivative receivables for the periods presented.

Derivative receivables

	Derivativ	es	
(in millions)	June 30,	December 3	31,
	2016	2015	
Interest rate	\$37,885	\$ 26,363	
Credit derivatives	1,794	1,423	
Foreign exchange	24,083	17,177	
Equity	7,127	5,529	
Commodity	7,557	9,185	
Total, net of cash collateral	78,446	59,677	
Liquid securities and other cash collateral held against derivative receivables <sup>(a)</sup>	(23,006)	)(16,580	)
Total, net of collateral	\$55,440	\$ 43,097	

Includes collateral related to derivative instruments where an appropriate legal opinion has not been either sought or obtained.

Derivative receivables reported on the Consolidated balance sheets were \$78.4 billion and \$59.7 billion at June 30, 2016, and December 31, 2015, respectively. These amounts represent the fair value of the derivative contracts after giving effect to legally enforceable master netting agreements and cash collateral held by the Firm. However, in management's view, the appropriate measure of current credit risk should also take into consideration additional liquid securities (primarily U.S. government and agency securities and other group of seven nations ("G7") government bonds) and other cash collateral held by the Firm aggregating \$23.0 billion and \$16.6 billion at June 30, 2016, and December 31, 2015, respectively, that may be used as security when the fair value of the client's exposure is in the Firm's favor. The increase in derivative receivables at June 30, 2016 from December 31, 2015, was predominantly related to client-driven market-making activities in CIB, which resulted in higher interest rate and foreign exchange derivative receivables, driven by market movements.

In addition to the collateral described in the preceding paragraph, the Firm also holds additional collateral (primarily cash, G7 government securities, other liquid government-agency and guaranteed securities, and corporate debt and equity securities) delivered by clients at the initiation of transactions, as well as collateral related to contracts that have a non-daily call frequency and collateral that the Firm has agreed to return but has not yet settled as of the reporting date. Although this collateral does not reduce the balances and is not included in the table above, it is available as security against potential exposure that could arise should the fair value of the client's derivative transactions move in the Firm's favor.

The derivative receivables fair value, net of all collateral, also does not include other credit enhancements, such as letters of credit. For additional information on the Firm's use of collateral agreements, see Note 5.

The following table summarizes the ratings profile by derivative counterparty of the Firm's derivative receivables, including credit derivatives, net of other liquid securities collateral, at the dates indicated. The ratings scale is based on the Firm's internal ratings, which generally correspond to the ratings as defined by S&P and Moody's. Ratings profile of derivative receivables

Rating equivalent	June 30, 2016	December 31, 2015
(in millions, except ratios)	Exposure net of exposure collateral	
AAA/Aaa to AA-/Aa3	\$13,92125 %	\$10,37124 %
A+/A1 to A-/A3	13,382 24	10,595 25
BBB+/Baa1 to BBB-/Baa3	17,918 32	13,807 32
BB+/Ba1 to B-/B3	9,160 17	7,500 17
CCC+/Caa1 and below	1,059 2	824 2
Total	\$55,440100 %	\$43,097100 %

As previously noted, the Firm uses collateral agreements to mitigate counterparty credit risk. The percentage of the Firm's derivatives transactions subject to collateral agreements — excluding foreign exchange spot trades, which are not typically covered by collateral agreements due to their short maturity — was 87% at each of June 30, 2016, and December 31, 2015, respectively.

#### Credit derivatives

The Firm uses credit derivatives for two primary purposes: first, in its capacity as a market-maker, and second, as an end-user, to manage the Firm's own credit risk associated with various exposures. For a detailed description of credit derivatives, see Credit derivatives in Note 5 of this Form

10-Q, and Note 6 of JPMorgan Chase's 2015 Annual Report.

Credit portfolio management activities

Included in the Firm's end-user activities are credit derivatives used to mitigate the credit risk associated with traditional lending activities (loans and unfunded commitments) and derivatives counterparty exposure in the Firm's

wholesale businesses (collectively, "credit portfolio

management" activities). Information on credit portfolio management activities is provided in the table below. For further information on derivatives used in credit portfolio management activities, see Credit derivatives in Note 5 of this Form 10-Q, and Note 6 of JPMorgan Chase's 2015 Annual Report.

Credit derivatives used in credit portfolio management activities

Notional amount of

protection

purchased and sold <sup>(a)</sup> June 30, December 31,

(in millions) 3016 30, Ecce 2016 2015

Credit derivatives used to manage:

Loans and lending-related commitments\$2,755\$2,289Derivative receivables20,43018,392Credit derivatives used in credit portfolio management activities\$23,185\$20,681

(a) Amounts are presented net, considering the Firm's net protection purchased or sold with respect to each underlying reference entity or index.

ALLOWANCE FOR CREDIT LOSSES

JPMorgan Chase's allowance for loan losses covers both the consumer (primarily scored) portfolio and wholesale (risk-rated) portfolio. The allowance represents management's estimate of probable credit losses inherent in the Firm's loan portfolio. Management also determines an allowance for wholesale and certain consumer lending-related commitments.

For a further discussion of the components of the allowance for credit losses and related management judgments, see Critical Accounting Estimates Used by the Firm on pages 76–77 and Note 14 of this Form 10-Q, and Critical Accounting Estimates Used by the Firm on pages 165–169 and Note 15 of JPMorgan Chase's 2015 Annual Report. At least quarterly, the allowance for credit losses is reviewed by the CRO, the Chief Financial Officer and the Controller of the Firm, and discussed with the Board of Directors Risk Policy Committee and the Audit Committee of the Board of Directors. As of June 30, 2016, JPMorgan Chase deemed the allowance for credit losses to be appropriate and sufficient to absorb probable credit losses inherent in the portfolio.

The consumer allowance for loan losses increased from December 31, 2015, due to higher loss rates in newer credit card vintages, as well as growth in the credit card and auto loan portfolios, partially offset by a reduction in the allowance primarily due to improved credit quality of the residential real estate loan portfolio, reflecting originations of high-quality mortgages and the run-off of lower-quality legacy portfolios. For additional information about delinquencies and nonaccrual loans in the consumer, excluding credit card, loan portfolio, see Consumer Credit Portfolio on pages 42–47 and Note 13.

The wholesale allowance for credit losses increased from December 31, 2015, primarily driven by downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios. Excluding these portfolios, the wholesale portfolio continued to experience generally stable credit quality trends and low charge-off rates.

Summary of changes in	the allowand	ce for credit	losses		2015			
Six months ended June 30, (in millions, except ratios)	Consumer, excluding credit card	Credit card	Wholesale	Total	Consumer, excluding credit card	Credit card	Wholesale	Total
Allowance for loan losses								
Beginning balance at January 1,	\$5,806	\$3,434	\$4,315	\$13,555	\$7,050	\$3,439	\$3,696	\$14,185
Gross charge-offs Gross recoveries	688 (301 )	1,874 (184 )	228 (14 )	2,790 (499 )	827 (337 )	1,776 (187 )	33 (53 )	2,636 (577 )
Net	,	· ·						, ,
charge-offs/(recoveries) Write-offs of PCI	387	1,690	214	2,291	490	1,589	(20)	2,059
loans <sup>(a)</sup>	88	_	_	88	110	_	_	110
Provision for loan losse	s316	1,940	796	3,052	42	1,589	265	1,896
Other	(1)	_	_	(1)	_	(5)	8	3
Ending balance at June	\$5,646	¢2.604	¢ 4 907		¢ 6 402			¢ 12 015
30,	\$3,040	\$3,684	\$4,897	\$14,227	\$6,492	\$3,434	\$3,989	\$13,915
Impairment								
methodology								
Asset-specific(b)	\$365	\$361	\$525	\$1,251	\$436	\$518	\$147	\$1,101
Formula-based	2,627	3,323	4,372	10,322	2,841	2,916	3,842	9,599
PCI	2,654	_	_	2,654	3,215	_		3,215
Total allowance for load losses	n \$5,646	\$3,684	\$4,897	\$14,227	\$6,492	\$3,434	\$3,989	\$13,915
Allowance for								
lending-related								
commitments								
Beginning balance at	\$14	<b>\$</b> —	\$772	\$786	\$13	<b>\$</b> —	\$609	\$622
January 1, Provision for								
			174	174	2		(4)	(2)
lending-related commitments	<del></del>	_	1/4	1/4	2	_	(4)	(2)
Ending balance at June								
30,	\$14	<b>\$</b> —	\$946	\$960	\$15	<b>\$</b> —	\$605	\$620
Impairment								
methodology								
Asset-specific	<b>\$</b> —	<b>\$</b> —	\$143	\$143	<b>\$</b> —	<b>\$</b> —	\$55	\$55
Formula-based	14	_	803	817	15	_	550	565
Total allowance for								
lending-related commitments <sup>(c)</sup>	\$14	\$—	\$946	\$960	\$15	<b>\$</b> —	\$605	\$620
Total allowance for	Φ.F	Φ2.C24	Φ.Σ. C. 4.2	Φ15.10 <del>5</del>	Φ.C. 505	Φ2.424	Φ 4 <b>5</b> 0 4	ф14.525
credit losses	\$5,660	\$3,684	\$5,843	\$15,187	\$6,507	\$3,434	\$4,594	\$14,535
Memo:								
Retained loans, end of	\$361,050	\$131,507	\$374,174	\$866,731	\$316,781	\$124,705	\$338,219	\$779,705
period Retained loans, average	353 250	127,771	365,006	846,036	305,463	122,542	329,921	757,926
retained toans, average	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	121,111	505,000	070,030	505,705	144,574	547,741	131,720

PCI loans, end of period	d 38,360	_	4	38,364	43,806	_	4	43,810	
Credit ratios Allowance for loan losses to retained loans	1.56	% 2.80	%1.31	%1.64	% 2.05	%2.75	%1.18	% 1.78	%
Allowance for loan losses to retained	111	NM	234	198	112	NM	457	209	
nonaccrual loans <sup>(d)</sup> Allowance for loan losses to retained nonaccrual loans excluding credit card Net	111	NM	234	147	112	NM	457	158	
charge-off/(recovery)	0.22	2.66	0.12	0.54	0.32	2.61	(0.01	) 0.55	
rates Credit ratios, excluding residential real estate PCI loans	;								
Allowance for loan losses to retained loans	0.93	2.80	1.31	1.40	1.20	2.75	1.18	1.45	
Allowance for loan losses to retained nonaccrual loans <sup>(d)</sup>	59	NM	234	161	57	NM	457	161	
Allowance for loan losses to retained nonaccrual loans excluding credit card Net	59	NM	234	110	57	NM	457	109	
charge-off/(recovery) rates	0.25	%2.66	%0.12	% 0.57	% 0.38	%2.61	%(0.01	)%0.58	%

Note: In the table above, the financial measures which exclude the impact of PCI loans are non-GAAP financial measures. For additional information, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17.

Write-offs of PCI loans are recorded against the allowance for loan losses when actual losses for a pool exceed (a) estimated losses that were recorded as purchase accounting adjustments at the time of acquisition. A write-off of a PCI loan is recognized when the underlying loan is removed from a pool (e.g., upon liquidation).

Includes risk-rated loans that have been placed on nonaccrual status and loans that have been modified in a TDR.

- (b) The asset-specific credit card allowance for loan losses modified in a TDR is calculated based on the loans' original contractual interest rates and does not consider any incremental penalty rates.
- (c) The allowance for lending-related commitments is reported in accounts payable and other liabilities on the Consolidated balance sheets.
- (d) The Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance.

#### Provision for credit losses

For the three and six months ended June 30, 2016, the provision for credit losses was \$1.4 billion and \$3.2 billion, respectively, compared with \$935 million and \$1.9 billion, respectively, in the prior year periods.

The total consumer provision for credit losses for the three and six months ended June 30, 2016 increased when compared with the prior year, as the prior year included a reduction in the allowance for loan losses and the current year included an increase. The current year increase in the allowance for loan losses was a result of higher loss rates in

newer credit card vintages, as well as growth in the credit card and auto loan portfolios, partially offset by reductions in the allowance due to continued improvement in home prices and delinquencies in the residential real estate portfolio as well as runoff in the student loan portfolio.

The wholesale provision for credit losses for the six months ended June 30, 2016 reflected higher net charge-offs and the impact of downgrades in the Oil & Gas, Natural Gas Pipelines, and Metals & Mining portfolios.

	Three months ended June 30,						Six months ended June 30,					
	Provis loan lo	ion for osses	lending_related provision for			Provision for loan losses		Provision for T lending-related procommitments of		l provis	provision for	
(in millions)	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
Consumer, excluding credit card	<sup>t</sup> \$95	\$(99)	\$ —	\$ 1	\$95	\$(98)	\$316	\$42	\$ —	\$ 2	\$316	\$44
Credit card	1,110	800		_	1,110	800	1,940	1,589			1,940	1,589
Total consumer	1,205	701		1	1,205	702	2,256	1,631		2	2,256	1,633
Wholesale	251	207	(54	) 26	197	233	796	265	174	(4)	970	261
Total	\$1,456	5\$908	\$ (54	) \$ 27	\$1,402	2\$935	\$3,052	2\$1,896	\$ 174	\$ (2)	\$3,226	5\$1,894

## MARKET RISK MANAGEMENT

Market risk is the potential for adverse changes in the value of the Firm's assets and liabilities resulting from changes in market variables such as interest rates, foreign exchange rates, equity prices, commodity prices, implied volatilities or credit spreads. For a discussion of the Firm's market risk management organization, risk identification and classification, tools used to measure risk, and risk monitoring and control, see Market Risk Management on pages 133–139 of JPMorgan Chase's 2015 Annual Report.

Value-at-risk

JPMorgan Chase utilizes VaR, a statistical risk measure, to estimate the potential loss from adverse market moves in a normal market environment. The Firm has a single VaR framework used as a basis for calculating Risk Management VaR and Regulatory VaR.

Since VaR is based on historical data, it is an imperfect measure of market risk exposure and potential losses, and it is not used to estimate the impact of stressed market conditions or to manage any impact from potential stress events. In addition, based on their reliance on available historical data, limited time horizons, and other factors, VaR measures are inherently limited in their ability to measure certain risks and to predict losses, particularly those associated with market illiquidity and sudden or severe shifts in market conditions. The Firm therefore considers other measures in addition to VaR, such as stress testing, to capture and manage its market risk positions.

In addition, for certain products, specific risk parameters are not captured in VaR due to the lack of inherent liquidity and availability of appropriate historical data. The Firm uses proxies to estimate the VaR for these and other products when daily time series are not available. It is likely that using an actual price-based time series for these products, if available, would affect the VaR results presented.

The Firm uses alternative methods to capture and measure those risk parameters that are not otherwise captured in VaR, including economic-value stress testing and nonstatistical measures. For further information, see Market Risk Management on pages 133–139 of the 2015 Annual Report.

The Firm's VaR model calculations are periodically evaluated and enhanced in response to changes in the composition of the Firm's portfolios, changes in market conditions, improvements in the Firm's modeling techniques and other factors. Such changes may affect historical comparisons to current VaR results. For information regarding model reviews and approvals, see Model Risk Management on page 142 of the 2015 Annual Report.

The Firm's Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. For risk management purposes, the Firm believes this methodology provides a stable measure of VaR that closely aligns to the day-to-day risk management decisions made by the lines of business, and provides the necessary and appropriate information to respond to risk events on a daily basis. The Firm calculates separately a daily aggregated VaR in accordance with regulatory rules ("Regulatory VaR"), which is used to derive the Firm's regulatory VaR-based capital requirements under Basel III. For further information regarding the key differences between Risk Management VaR and Regulatory VaR, see page 135 of the 2015 Annual Report. For additional information on Regulatory VaR and the other components of market risk regulatory capital for the Firm (e.g. VaR-based measure, stressed VaR-based measure and the respective backtesting), see JPMorgan Chase's Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website at: (http://investor.shareholder.com/jpmorganchase/basel.cfm).

The table below shows the results of the Firm's Risk Management VaR measure using a 95% confidence level.

Total VaR	Three months ended June 30,									six months ended June 30,		
	2016			2015			At June	30,	Averag	e		
(in millions)	Avg.	Min	Max	Avg.	Min	Max	2016	2015	2016	2015		
CIB trading VaR by risk type				_								
Fixed income	\$46	\$37	\$62	\$41	\$31	\$52	\$60	\$45	\$46	\$38		
Foreign exchange	12	7	17	9	6	13	16	9	11	9		
Equities	14	10	20	16	11	25	11	23	18	17		
Commodities and other	9	7	10	9	8	13	10	9	9	9		
Diversification benefit to CIB trading VaR	(37) <sup>(a)</sup>	NM <sup>(b)</sup>	NM <sup>b)</sup>	(37) <sup>(a)</sup>	NM <sup>(b)</sup>	NM <sup>(b)</sup>	(48) <sup>(a)</sup>	(35) <sup>(a)</sup>	(35 ) <sup>(a)</sup>	(37 ) <sup>(a)</sup>		
CIB trading VaR	44	35	59	38	28	51	49	51	49	36		
Credit portfolio VaR	12	11	13	15	12	19	13	13	12	16		
Diversification benefit to CIB VaR	$(12)^{(a)}$	NM <sup>(b)</sup>	NM <sup>(b)</sup>	$(10)^{(a)}$	NM <sup>(b)</sup>	$NM^{(b)}$	$(12)^{(a)}$	$(11)^{(a)}$	$(11)^{(a)}$	$(9)^{(a)}$		
CIB VaR	44	34	59	43	35	53	50	53	50	43		
Mortgage Banking VaR	3	1	5	4	3	7	2	5	4	4		
Treasury and CIO VaR	11	7	13	4	3	4	13	4	9	4		
Asset Management VaR	4	3	4	3	2	3	4	3	3	3		
Diversification benefit to other VaR	$(5)^{(a)}$	NM <sup>(b)</sup>	$NM^{(b)}$	$(4)^{(a)}$	$NM^{(b)}$	$NM^{(b)}$	$(4)^{(a)}$	$(3)^{(a)}$	$(5)^{(a)}$	$(4)^{(a)}$		
Other VaR	13	10	16	7	6	10	15	9	11	7		
Diversification benefit to CIB and other VaR	(12) <sup>(a)</sup>	NM <sup>(b)</sup>	NM <sup>b)</sup>	(8 ) <sup>(a)</sup>	NM <sup>(b)</sup>	NM <sup>(b)</sup>	(12) <sup>(a)</sup>	(11) <sup>(a)</sup>	(12) <sup>(a)</sup>	(7 ) <sup>(a)</sup>		
Total VaR	\$45	\$36	\$56	\$42	\$35	\$51	\$53	\$51	\$49	\$43		

Average portfolio VaR and period-end portfolio VaR were less than the sum of the VaR of the components (a) described above, which is due to portfolio diversification. The diversification effect reflects the fact that the risks are not perfectly correlated.

(b) Designated as NM, because the minimum and maximum may occur on different days for different risk components, and hence it is not meaningful to compute a portfolio-diversification effect.

As presented in the table above, average Total VaR increased for the three months ended June 30, 2016 as compared with the respective prior year period. The increase is due to changes in the profile of the fixed income and foreign exchange risk exposures for CIB Trading VaR. This was offset by a lower risk profile in equities and lower exposures arising from select positions in Credit Portfolio VaR. Treasury and CIO VaR increased due to hedging activities in relation to the Firm's non-U.S. dollar long term debt issuance program.

The average total VaR for the six months ended June 30, 2016 increased from the prior year largely for the reasons described above relating to VaR for the three months ended June 30, 2016.

The Firm continues to enhance its VaR model calculations and the time series inputs related to certain asset-backed products.

The Firm's average total VaR diversification benefit was

\$12 million, or 27% of the sum, for the three months ended June 30, 2016 compared with \$8 million, or 19% of the sum, for the comparable 2015 period.

VaR exposure can vary significantly as positions change, market volatility fluctuates and diversification benefits change.

The Firm evaluates the effectiveness of its VaR methodology by back-testing, which compares the daily Risk

## VaR back-testing

Management VaR results with the daily gains and losses recognized on market-risk related revenue. The Firm's definition of market risk-related gains and losses is consistent with the definition used by the banking regulators under Basel III. Under this definition market risk-related gains and losses are defined as: gains and losses on the positions included in the Firm's Risk Management VaR excluding fees, commissions, certain valuation adjustments (e.g., liquidity and DVA), net interest income, and gains and losses arising from intraday trading. The following chart compares the daily market risk-related gains and losses with the Firm's Risk Management VaR for the six months ended June 30, 2016. As the chart presents market risk-related gains and losses related to those positions included in the Firm's Risk Management VaR, the results in the table below differ from the results of back-testing disclosed in the Market Risk section of the Firm's Basel III Pillar 3 Regulatory Capital Disclosures

reports, which are based on Regulatory VaR applied to covered positions. The chart shows that for the six months ended June 30, 2016, the Firm observed 3 VaR back-testing exceptions and posted gains on 82 of the 129 days. The Firm observed 2 VaR back-testing exceptions and posted gains on 43 of the 65 days for the three months ended June

Daily Market Risk-Related Gains and Losses vs. Risk Management VaR (1-day, 95% Confidence level) Six months ended June 30, 2016

Market Risk-Related Gains and Losses

#### Risk Management VaR

30, 2016.

January February March April May June

For the three months ended June 30, 2016 there were 2 back-testing exceptions. These exceptions occurred towards the end of June 2016 subsequent to the U.K. referendum on membership in the European Union and reflect the elevated market volatility observed across multiple asset classes following the outcome of the vote.

Spread sensitivity on derivatives and fair value option elected liabilities

VaR excludes the impact of changes in the spread related to derivatives FVA/DVA and fair value option elected liabilities DVA. At June 30, 2016, the sensitivity of FVA/DVA

expressed as a one basis point parallel increase in the spread was a net gain of approximately \$11 million. This sensitivity may not be representative of the actual gain or loss realized within a period, as the movement in spreads across various maturities may vary.

## Earnings-at-risk

The VaR and sensitivity measures described above illustrate the economic sensitivity of the Firm's Consolidated balance sheets to changes in market variables. The effect of interest rate exposure on the Firm's reported net income is also important as interest rate risk represents one of the Firm's significant market risks. Interest rate risk arises not only from trading activities but also from the Firm's traditional banking activities, which include extension of loans and credit facilities, taking deposits and issuing debt. The Firm evaluates its structural interest rate risk exposure through earnings-at-risk, which measures the extent to which changes in interest rates will affect the Firm's net interest income and interest rate-sensitive fees. Earnings-at-risk excludes the impact of CIB's markets-based activities and CCB's MSRs, as these sensitivities are captured under VaR.

The Firm generates a net interest income baseline, and then conducts simulations of changes for interest rate-sensitive assets and liabilities denominated in U.S. dollars and other currencies ("non-U.S. dollar" currencies). Earnings-at-risk scenarios estimate the potential change in this net interest income baseline, excluding CIB's markets-based activities and MSRs, over the following 12 months utilizing multiple assumptions. These scenarios consider the impact on exposures as a result of changes in interest rates from baseline rates, as well as the pricing sensitivities of deposits, optionality and changes in product mix. The scenarios include forecasted balance sheet changes, as well as modeled prepayment and reinvestment behavior, but do not include assumptions about actions that could be taken by the Firm in response to any such instantaneous rate changes. Mortgage prepayment assumptions are based on current interest rates compared with underlying contractual rates, the time since origination, and other factors which are updated periodically based on historical experience. The Firm's earnings-at-risk scenarios are periodically evaluated and enhanced in response to changes in the composition of the Firm's balance sheet, changes in market conditions, improvements in the Firm's simulation and other factors.

The Firm's U.S. dollar sensitivities are presented in the table below. The non-U.S. dollar sensitivities are not material to the Firm's earnings-at-risk at June 30, 2016.

JPMorgan Chase's 12-month pre-tax net interest income sensitivity profiles (Excludes the impact of CIB's markets-based activities and MSRs)

(in billions) Instantaneous change in

rates

June 30, 2016 +200**bp**00bps-100bps-200bps U.S. dollar \$4.9\$ 3.0 NM <sup>(a)</sup> NM <sup>(a)</sup>

(a) Given the current level of market interest rates, downward parallel 100 and 200 basis point earnings-at-risk scenarios are not considered to be meaningful.

The Firm's benefit to rising rates on U.S. dollar assets and liabilities is largely a result of reinvesting at higher yields and assets re-pricing at a faster pace than deposits. The Firm's U.S. dollar sensitivity profile at June 30, 2016 was not materially different than at December 31, 2015.

Separately, another U.S. dollar interest rate scenario used by the Firm — involving a steeper yield curve with long-term rates rising by 100 basis points and short-term rates staying at current levels — results in a 12-month pre-tax benefit to net interest income, excluding CIB's markets-based activities and MSRs, of approximately \$700 million. The increase in net interest income under this scenario reflects the Firm reinvesting at the higher long-term rates, with funding costs remaining unchanged. The result of the comparable non-U.S. dollar analysis was not material to the Firm.

## COUNTRY RISK MANAGEMENT

Country risk is the risk that a sovereign event or action alters the value or terms of contractual obligations of obligors, counterparties and issuers or adversely affects markets related to a particular country. The Firm has a comprehensive country risk management framework for assessing country risks, determining risk tolerance, and measuring and monitoring direct country exposures in the Firm. The Country Risk Management group is responsible for developing guidelines and policies for managing country risk in both emerging and developed countries. The Country Risk Management group actively monitors the various portfolios giving rise to country risk to ensure the Firm's country risk exposures are diversified and that exposure levels are appropriate given the Firm's strategy and risk tolerance relative to a country.

For information on the June 23, 2016 U.K. referendum on membership in the European Union, see Executive Overview on pages 5–7.

For a discussion of the Firm's Country Risk Management organization, and country risk identification, measurement, monitoring and control, see pages 140–141 of JPMorgan Chase's 2015 Annual Report.

The following table presents the Firm's top 20 exposures by country (excluding the U.S.) as of June 30, 2016. The selection of countries is based solely on the Firm's largest total exposures by country, based on the Firm's internal country risk management approach, and does not represent the Firm's view of any actual or potentially adverse credit conditions. Country exposures may fluctuate from period to period due to client activity and market flows. In the table below, the increase in the Germany exposure since March 31, 2016, largely reflects an increase in the balance of Euros placed with the German central bank, driven by changing client positions and prevailing market and liquidity conditions.

Top 20 country exposures

June	30,	2016

	Land	Trading and ing <sup>(a)</sup> investing <sup>(b)(c)</sup>	Other(d)	Total
(in billions)	Lenu	investing(b)(c)	Ouler	exposure
United Kingdom	\$34.5	5\$ 19.4	\$ 0.8	\$ 54.7
Germany	35.4	17.1	0.3	52.8
Japan	19.9	6.1	0.3	26.3
France	12.9	8.9	0.1	21.9
China	8.5	6.6	1.2	16.3
Canada	11.8	2.9	0.1	14.8
Switzerland	9.3	0.3	5.1	14.7
Australia	7.2	4.7		11.9
Brazil	5.1	5.8		10.9
Netherlands	6.0	3.7	1.1	10.8
India	3.5	5.1	0.3	8.9
Hong Kong	2.2	2.3	4.0	8.5
Korea	5.2	2.4	0.5	8.1
Luxembourg	7.2	0.3		7.5
Italy	4.1	3.1	0.1	7.3
Singapore	2.2	1.3	1.4	4.9
Mexico	3.5	1.1		4.6
Saudi Arabia	3.4	0.9		4.3
Spain	3.3	0.8	_	4.1
Belgium	2.1	1.4		3.5

Lending includes loans and accrued interest receivable (net of collateral and the allowance for loan losses),

<sup>(</sup>a) deposits with banks, acceptances, other monetary assets, issued letters of credit net of participations, and unused commitments to extend credit. Excludes intra-day and operating exposures, such as from settlement and clearing activities.

- (b) Includes market-making inventory, AFS securities, counterparty exposure on derivative and securities financings net of collateral and hedging.
- Includes single reference entity ("single-name"), index and tranched credit derivatives for which one or more of the underlying reference entities is in a country listed in the above table.
- (d) Includes capital invested in local entities and physical commodity inventory.

## CAPITAL MANAGEMENT

Capital risk is the risk the Firm has an insufficient level and composition of capital to support the Firm's business activities and associated risks during both normal economic environments and under stressed conditions. For a discussion on the Firm's Capital Management see pages 149–158 of JPMorgan Chase's 2015 Annual Report. A strong capital position is essential to the Firm's business strategy and competitive position. Maintaining a strong balance sheet to manage through economic volatility is considered a strategic imperative by the Firm's Board of Directors, CEO and Operating Committee. The Firm's capital management strategy focuses on maintaining long-term stability to enable the Firm to build and invest in market-

leading businesses, even in a highly stressed environment. The Firm executes its capital management strategy through the establishment of minimum capital targets and a strong capital governance framework. The Firm's minimum capital targets are set based on the most binding of three pillars: an internal assessment of the Firm's capital needs; an estimation of required capital under the CCAR and Dodd Frank Act stress testing requirements; and current regulatory minimums. The capital governance framework includes regular monitoring of the Firm's capital positions, stress testing and defining escalation protocols, both at the Firm and line of business level.

The following tables present the Firm's Transitional and Fully Phased-In risk-based and leverage-based capital metrics under both the Basel III Standardized and Advanced Approaches. The Firm's Basel III CET1 ratios exceed the regulatory minimum as of June 30, 2016, and December 31, 2015.

	Transitional			,		Fully Phase	d-In			
June 30, 2016 (in millions, except ratios)	Standardize	dAdvanced		Minimum capital ratios <sup>(b)</sup>		StandardizedAdvanced			Minin capita ratios	1
Risk-based capital metrics:										
CET1 capital	\$179,593	\$179,593				\$178,916	\$178,916			
Tier 1 capital	204,390	204,390				204,717	204,717			
Total capital	238,999	227,865				236,940	225,806			
Risk-weighted assets	1,469,430	1,497,509				1,477,165	1,505,708			
CET1 capital ratio	12.2 %	12.0	%	6.25	%	12.1 %	11.9	%	10.5	%
Tier 1 capital ratio	13.9	13.6		7.75		13.9	13.6		12.0	
Total capital ratio	16.3	15.2		9.75		16.0	15.0		14.0	
Leverage-based capital metrics										
Adjusted average assets	2,391,819	2,391,819				2,393,644	2,393,644			
Tier 1 leverage ratio <sup>(a)</sup>	8.5 %	8.5	%	4.0		8.6 %	8.6	%	4.0	
SLR leverage exposure	NA	\$3,094,545				NA	\$3,096,370	)		
SLR	NA	6.6	%	NA		NA	6.6	%	5.0	(d)
	Transitional					Fully Phase	d-In			
December 31, 2015 (in millions, except ratios)	Standardize	dAdvanced		Minir capita ratios	ıl	Standardize	dAdvanced		Minin capita ratios	1
Risk-based capital metrics:										
CET1 capital	\$175,398	\$175,398				\$173,189	\$173,189			
Tier 1 capital	200,482	200,482				199,047	199,047			
Total capital	234,413	224,616				229,976	220,179			
Risk-weighted assets	1,465,262	1,485,336				1,474,870	1,495,520			
CET1 capital ratio	12.0 %	11.8	%	4.5	%	11.7 %	11.6	%	10.5	%
Tier 1 capital ratio	13.7	13.5		6.0		13.5	13.3		12.0	
Total capital ratio	16.0	15.1		8.0		15.6	14.7		14.0	
Leverage-based capital metrics										

Adjusted average assets	2,358,471	2,358,471		2,360,49	9	2,360,499	)	
Tier 1 leverage ratio <sup>(a)</sup>	8.5 %	8.5	% 4.0	8.4	%	8.4	% 4.0	
SLR leverage exposure	NA	\$3,079,79	7	NA		\$3,079,11	9	
SLR	NA	6.5	NA	NA		6.5	% 50	(d)

Note: As of June 30, 2016, and December 31, 2015, the lower of the Standardized or Advanced capital ratios under each of the Transitional and Fully Phased-In approaches in the table above represents the Firm's Collins Floor.

- The Tier 1 leverage ratio is not a risk-based measure of capital. This ratio is calculated by dividing Tier 1 capital by adjusted average assets.
- Represents the transitional minimum capital ratios applicable to the Firm under Basel III as of June 30, 2016, and December 31, 2015. At June 30, 2016, the CET1 minimum capital ratio includes 0.625% resulting from the phase
- (b)in of the Firm's 2.5% capital conservation buffer and 1.125%, resulting from the phase in of the Firm's estimated 4.5% globally systematically important banks ("GSIB") surcharge, as of December 31, 2014, published by the Federal Reserve on July 20, 2015.
- Represents the minimum capital ratios applicable to the Firm on a fully phased-in Basel III basis. At June 30, 2016, and December 31, 2015, the ratios include the Firm's estimate of its Fully Phased-In U.S. GSIB surcharge of 3.5%, based on the final U.S. GSIB rule published by the Federal Reserve on July 20, 2015. The minimum capital ratios will be fully phased-in effective January 1, 2019. For additional information on the GSIB surcharge, see page 65. (d) In the case of the SLR, the fully phased-in minimum ratio is effective beginning January 1, 2018.

#### Basel III overview

Basel III capital rules, for large and internationally active U.S. bank holding companies and banks, including the Firm and its insured depository institution ("IDI") subsidiaries, revised, among other things, the definition of capital and introduced a new CET1 capital requirement. Basel III presents two comprehensive methodologies for calculating risk weighted assets ("RWA"). A general (Standardized) approach ("Basel III Standardized"), and an advanced approach ("Basel III Advanced"); and sets out minimum capital ratios and overall capital adequacy standards. Certain of the requirements of Basel III are subject to phase-in periods that began on January 1, 2014 and continue through the end of 2018 ("transitional period").

The capital adequacy of the Firm and its national bank subsidiaries is evaluated against the Basel III approach (Standardized or Advanced) which results in the lower ratio (the "Collins Floor"), as required by the Collins Amendment of the Dodd-Frank Act.

Basel III establishes capital requirements for calculating credit risk and market risk RWA, and in the case of Basel III Advanced, operational risk RWA. Key differences in the calculation of credit risk RWA between the Standardized and Advanced approaches are that for Basel III Advanced, credit risk RWA is based on risk-sensitive approaches which largely rely on the use of internal credit models and parameters, whereas for Basel III Standardized, credit risk RWA is generally based on supervisory risk-weightings which vary primarily by counterparty type and asset class. Market risk RWA is calculated on a generally consistent basis between Basel III Standardized and Basel III Advanced. In addition to the RWA calculated under these methodologies, the Firm may supplement such amounts to incorporate management judgment and feedback from its bank regulators.

Basel III also includes a requirement for Advanced Approach banking organizations, including the Firm, to calculate SLR. For additional information on SLR, see page 67.

Basel III Fully Phased-In

Basel III capital rules will become fully phased-in on January 1, 2019, at which point the Firm will continue to calculate its capital ratios under both the Basel III Standardized and Advanced Approaches. While the Firm has imposed Basel III Standardized Fully Phased-In RWA limits on its lines of business, the Firm continues to manage each of the businesses (including line of business equity allocations), as well as the corporate functions, primarily on a Basel III Advanced Fully Phased-In basis.

For additional information on the Firm's capital, RWA and capital ratios that are presented under Basel III Standardized and Advanced Fully Phased-In rules and the Firm's and JPMorgan Chase Bank, N.A.'s and Chase Bank USA, N.A.'s SLRs calculated under the Basel III Advanced Fully Phased-In rules, which are considered key regulatory capital measures, see Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 16–17.

The Firm's estimates of its Basel III Standardized and Advanced Fully Phased-In capital, RWA and capital ratios and of the Firm's, JPMorgan Chase Bank, N.A.'s, and Chase Bank USA, N.A.'s SLRs reflect management's current understanding of the U.S. Basel III rules based on the current published rules and on the application of such rules to the Firm's businesses as currently conducted. The actual impact on the Firm's capital ratios and SLR as of the effective date of the rules may differ from the Firm's current estimates depending on changes the Firm may make to its businesses in the future, further implementation guidance from the regulators, and regulatory approval of certain of the Firm's internal risk models (or, alternatively, regulatory disapproval of the Firm's internal risk models that have previously been conditionally approved).

Risk-based capital regulatory minimums

The Basel III rules include minimum capital ratio requirements that are subject to phase-in periods through the end of 2018. The capital adequacy of the Firm and its national bank subsidiaries, both during the transitional period and upon full phase-in, is evaluated against the Basel III approach (Standardized or Advanced) which results, for each quarter, in the lower ratio, the Collins Floor.

Certain banking organizations, including the Firm, will be required to hold additional amounts of capital to serve as a "capital conservation buffer." The capital conservation buffer is intended to be used to absorb potential losses in times of financial or economic stress. If not maintained, the Firm could be limited in the amount of capital that may be

distributed, including dividends and common equity repurchases. The capital conservation buffer is to be phased-in over time, beginning January 1, 2016 through January 1, 2019.

Further, the Firm will be required to hold additional levels of capital in the form of a GSIB surcharge and as an expansion of the capital conservation buffer, any countercyclical capital buffer requirement that may be imposed. On July 20, 2015, the Federal Reserve issued a final rule requiring GSIBs to calculate their GSIB surcharge, on an annual basis, under two separately prescribed methods, and to be subject to the higher of the two. The first method ("Method 1") reflects the GSIB surcharge as prescribed by Basel rules, and is calculated across five criteria: size, cross-jurisdictional activity, interconnectedness, complexity and substitutability. The second method ("Method 2") modifies the requirements to include a measure of short-term wholesale funding in place of substitutability, and introduces a GSIB score "multiplication factor."

On July 20, 2015, the date of the last published estimate, the Federal Reserve had estimated the Firm's GSIB surcharge to be 2.5% under Method 1 and 4.5% under Method 2 as of December 31, 2014. Accordingly, the Firm's minimum capital ratios applicable in 2016 include 1.125%, resulting from the phase-in of the 4.5% GSIB surcharge estimated at the date. Based upon data as of December 31, 2015, the Firm estimates its fully phased-in GSIB surcharge would be 2.5% of CET1 capital under Method 1 and 3.5% under Method 2. The reduction in the estimated GSIB surcharge to 3.5% is expected to be phased into the Firm's minimum CET1 capital ratio commencing January 1, 2017. The countercyclical capital buffer takes into account the macro financial environment in which large, internationally active banks function. As of December 31, 2015 the Federal Reserve reaffirmed setting the U.S. countercyclical capital buffer at 0%, and stated that it will review the amount at least annually. The countercyclical capital buffer can be increased if the Federal Reserve, FDIC and OCC determine that credit growth in the economy has become excessive and can be set at up to an additional 2.5% of RWA subject to a 12 month implementation period. Based on the Firm's most recent estimate of its GSIB surcharge and the current countercyclical buffer being set at 0%, the Firm estimates its fully phased-in CET1capital requirement would be 10.5% (reflecting the 4.5% CET1 capital requirement, the fully phased in 2.5% capital conservation buffer and the GSIB surcharge of 3.5%). As well as meeting the capital ratio requirements of Basel III, the Firm must, in order to be "well-capitalized", maintain a minimum 6% Tier 1 and 10% Total capital requirement. Each of the Firm's IDI subsidiaries must maintain a minimum 5% Tier 1 leverage, 6.5% CET1, 8% Tier 1 and 10% Total capital requirement to meet the definition of "well-capitalized" under the Prompt Correction Action ("PCA") requirements of the FDIC Improvement Act for IDI subsidiaries. The PCA standards for IDI subsidiaries were effective January 1, 2015.

#### Capital

A reconciliation of total stockholders' equity to Basel III Fully Phased-In CET1 capital, Tier 1 capital and Basel III Advanced and Standardized Fully Phased-In Total capital is presented in the table below.

For additional information on the components of regulatory capital, see Note 20.

Capital components

(in millions)	June 30, 2016
Total stockholders' equity	\$252,423
Less: Preferred stock	26,068
Common stockholders' equity	226,355
Less:	
Goodwill	47,303
Other intangible assets	917
Add:	
Deferred tax liabilities <sup>(a)</sup>	3,220
Less: Other CET1 capital adjustments	2,439
Standardized/Advanced CET1 capital	178,916
Preferred stock	26,068
Less:	
Other Tier 1 adjustments <sup>(b)</sup>	267
Standardized/Advanced Tier 1 capital	\$204,717

Long-term debt and other instruments qualifying as	\$17,088
Tier 2 capital	\$17,000
Qualifying allowance for credit losses	15,187
Other	(52)
Standardized Fully Phased-In Tier 2 capital	\$32,223
Standardized Fully Phased-in Total capital	\$236,940
Adjustment in qualifying allowance for credit losses for Advanced Tier 2 capital	(11,134)
Advanced Fully Phased-In Tier 2 capital	\$21,089
Advanced Fully Phased-In Total capital	\$225,806

<sup>(</sup>a) Represents deferred tax liabilities related to tax-deductible goodwill and to identifiable intangibles created in nontaxable transactions, which are netted against goodwill and other intangibles when calculating TCE.

(b) Includes the deduction associated with the permissible holdings of covered funds (as defined by the Volcker Rule) acquired after December 31, 2013. The deduction was not material as of June 30, 2016.

The following table presents a reconciliation of the Firm's Basel III Transitional CET1 capital to the Firm's estimated Basel III Fully Phased-In CET1 capital as of June 30, 2016.

(in millions)	June 30,			
(III IIIIIIIIIIII)	2016			
Transitional CET1 capital	\$179,593			
AOCI phase-in <sup>(a)</sup>	823			
CET1 capital deduction phase-in <sup>(b)</sup>	(1,117)			
Intangibles deduction phase-in(c)	(329)			
Other adjustments to CET1 capital <sup>(d)</sup>	(54)			
Fully Phased-In CET1 capital	\$178,916			

- (a) Includes the remaining balance of AOCI related to AFS debt securities and defined benefit pension and other postretirement employee benefit ("OPEB") plans that will qualify as Basel III CET1 capital upon full phase-in.
- (b) Predominantly includes regulatory adjustments related to changes in DVA, as well as CET1 deductions for defined benefit pension plan assets and deferred tax assets related to net operating loss and tax credit carryforwards.
- Relates to intangible assets, other than goodwill and MSRs, that are required to be deducted from CET1 capital upon full phase-in.
- (d) Includes minority interest and the Firm's investments in its own CET1 capital instruments.

# Capital rollforward

The following table presents the changes in Basel III Fully Phased-In CET1 capital, Tier 1 capital and Tier 2 capital for the six months ended June 30, 2016.

for the SIX months ended suite 30, 2010.	
Six months ended June 30,	2016
(in millions)	
Standardized/Advanced CET1 capital at December 31, 2015	\$173,189
Net income applicable to common equity	10,897
Dividends declared on common stock	(3,414)
Net purchase of treasury stock	(3,379)
Changes in additional paid-in capital	(526)
Changes related to AOCI <sup>(a)</sup>	1,557
Adjustment related to DVA <sup>(a)</sup>	491
Other	101
Increase in Standardized/Advanced CET1 capital	5,727
Standardized/Advanced CET1 capital at June 30, 2016	\$178,916
Standardized/Advanced Tier 1 capital at December 31, 2015	\$199,047
Change in CET1 capital	5,727
Net issuance of noncumulative perpetual preferred stock	
Other	(57)
Increase in Standardized/Advanced Tier 1 capital	5,670
Standardized/Advanced Tier 1 capital at June 30, 2016	\$204,717
Standardized Tier 2 capital at December 31, 2015	\$30,929
Change in long-term debt and other instruments qualifying as Tier 2	409
Change in qualifying allowance for credit losses	846
Other	39
Increase in Standardized Tier 2 capital	1,294
Standardized Tier 2 capital at June 30, 2016	\$32,223
Standardized Total capital at June 30, 2016	\$236,940
Advanced Tier 2 capital at December 31, 2015	\$21,132

Change in long-term debt and other instruments qualifying as Tier 2	409	
Change in qualifying allowance for credit losses	(489	)
Other	37	
Increase in Advanced Tier 2 capital	(43	)
Advanced Tier 2 capital at June 30, 2016	\$21,089	
Advanced Total capital at June 30, 2016	\$225,806	5

Effective January 1, 2016, the adjustment reflects the impact of the adoption of DVA through OCI. For further discussion of the accounting change refer to Note 19.

#### RWA rollforward

The following table presents changes in the components of RWA under Basel III Standardized and Advanced Fully Phased-In for the six months ended June 30, 2016. The amounts in the rollforward categories are estimates, based on the predominant driver of the change.

	Standardized		Advanced				
Six months ended	Credit	Market	Total	Credi	t Marke	etOperationa	Total
June 30, 2016	risk		RWA	risk	risk	risk	RWA
(in billions)	RWA	RWA	KWA	RWA	RWA	RWA	KWA
At December 31, 2015	\$1,333	\$142	\$1,475	\$954	\$ 142	\$ 400	\$1,496
Model & data changes <sup>(a)</sup>	4	(13)	(9)	4	(13	)—	(9)
Portfolio runoff <sup>(b)</sup>	(8	)(2)	(10)	(8	)(2	)—	(10)
Movement in portfolio levels(c)	18	3	21	27	2		29
Changes in RWA	14	(12)	2	23	(13	)—	10
June 30, 2016	\$1,347	\$130	\$1,477	\$977	\$129	\$ 400	\$1,506

- (a) Model & data changes refer to movements in levels of RWA as a result of revised methodologies and/or treatment per regulatory guidance (exclusive of rule changes).
  - Portfolio runoff for credit risk RWA primarily reflects reduced risk from position rolloffs in legacy portfolios in
- (b) Mortgage Banking (under both the Standardized and Advanced framework); and for market risk RWA reflects reduced risk from position rolloffs in legacy portfolios in the wholesale businesses.
- (c) Movement in portfolio levels for credit risk RWA refers to changes in book size, composition, credit quality, and market movements; and for market risk RWA refers to changes in position and market movements.

Supplementary leverage ratio

For additional information on the SLR, see Capital Management on pages 149–158 of JPMorgan Chase's 2015 Annual Report.

The following table presents the components of the Firm's Fully Phased-In SLR as of June 30, 2016.

(in millions expent notio)	June 30,
(in millions, except ratio)	2016
Tier 1 Capital	\$204,717
Total average assets	2,441,189
Less: amounts deducted from Tier 1 capital	47,545
Total adjusted average assets <sup>(a)</sup>	2,393,644
Off-balance sheet exposures <sup>(b)</sup>	702,726
SLR leverage exposure	\$3,096,370
SLR	6.6 %

Adjusted average assets, for purposes of calculating the SLR, includes total quarterly average assets adjusted for (a) on-balance sheet assets that are subject to deduction from Tier 1 capital predominantly goodwill and other intangible assets.

(b) Off-balance sheet exposures are calculated as the average of the three month-end spot balances in the reporting quarter.

As of June 30, 2016, the Firm estimates that JPMorgan Chase Bank, N.A.'s and Chase Bank USA, N.A.'s Fully Phased-In SLRs are approximately 6.6% and 8.8%, respectively.

Line of business equity

The Firm's framework for allocating capital to its business segments (line of business equity) is based on the following objectives:

Integrate firmwide and line of business capital management activities;

Measure performance consistently across all lines of business; and

Provide comparability with peer firms for each of the lines of business

Each business segment is allocated capital by taking into consideration stand-alone peer comparisons, regulatory capital requirements (as estimated under Basel III Advanced Fully Phased-In) and economic risk. Capital is also allocated to each line of business for, among other things, goodwill and other intangibles associated with acquisitions effected by the line of business. ROE is measured and internal targets for expected returns are established as key measures of a business segment's performance.

Line of business common equity

	June 30,December 3			
(in billions)	2016	2015		
Consumer & Community Banking	\$51.0	\$ 51.0		
Corporate & Investment Bank	64.0	62.0		
Commercial Banking	16.0	14.0		
Asset Management	9.0	9.0		
Corporate	86.4	85.5		
Total common stockholders' equity	\$226.4	\$ 221.5		

On at least an annual basis, the Firm assesses the level of capital required for each line of business as well as the assumptions and methodologies used to allocate capital. The line of business equity allocations are updated as refinements are implemented. The table below reflects the Firm's assessed level of capital required for each line of business as of the dates indicated.

Line of business common equity	Quarterly average		ge
(in billions)	2Q16	4Q15	2Q15
Consumer & Community Banking	\$51.0	\$51.0	\$51.0
Corporate & Investment Bank	64.0	62.0	62.0
Commercial Banking	16.0	14.0	14.0
Asset Management	9.0	9.0	9.0
Corporate	84.4	83.5	77.7
Total common stockholders' equity	\$224.4	\$219.5	\$213.7

Planning and stress testing

**CCAR** 

The Federal Reserve requires large bank holding companies, including the Firm, to submit a capital plan on an annual basis. Through the CCAR, the Federal Reserve evaluates each bank holding company's ("BHC") capital adequacy and internal capital adequacy assessment processes, as well as its plans to make capital distributions, such as dividend payments or stock repurchases.

On June 29, 2016, the Federal Reserve informed the Firm that it did not object, on either a quantitative or qualitative basis, to the Firm's 2016 capital plan.

Capital actions

Dividends

The Firm's common stock dividend policy reflects JPMorgan Chase's earnings outlook, desired dividend payout ratio, capital objectives, and alternative investment opportunities. On May 17, 2016, the Firm announced that its Board of Directors had increased the quarterly common stock dividend to \$0.48 per share, effective with the dividend paid on July 31, 2016. The Firm's dividends will be subject to the Board of Directors' approval at the customary times those dividends are to be declared.

Common equity

On March 17, 2016, the Firm announced that its Board of Directors had authorized the repurchase of up to an additional \$1.9 billion of common equity (common stock and warrants) through June 30, 2016 under its equity repurchase program. This amount is in addition to the \$6.4 billion of common equity that was previously authorized for repurchase between April 1, 2015 and June 30, 2016.

Following receipt of the Federal Reserve's non-objection to the Firm's 2016 capital plan the Firm's Board of Directors authorized the repurchase of up to \$10.6 billion of common equity (common stock and warrants) between July 1, 2016 and June 30, 2017. This authorization includes shares repurchased to offset issuances under the Firm's equity-based compensation plans.

The following table sets forth the Firm's repurchases of common equity for the three and six months ended June 30, 2016 and 2015. There were no warrants repurchased during the three and six months ended June 30, 2016 and 2015.

Three months Six months ended June 30, 30,

 (in millions)
 2016
 2015
 2016
 2015

 Total shares of common stock repurchased
 45.8
 19.2
 75.0
 51.7

 Aggregate common stock repurchases
 \$2,840\$\$1,249\$\$4,536\$\$3,149

There were 47.3 million warrants outstanding at June 30, 2016 compared with 47.4 million outstanding at December 31, 2015.

The Firm may, from time to time, enter into written trading plans under Rule 10b5-1 of the Securities Exchange Act of 1934 to facilitate repurchases in accordance with the common equity repurchase program. A Rule 10b5-1 repurchase plan allows the Firm to repurchase its equity during periods when it would not otherwise be repurchasing common equity — for example, during internal trading blackout periods. All purchases under a Rule 10b5-1 plan must be made according to a predefined plan established when the Firm is not aware of material nonpublic information. The authorization to repurchase common equity will be utilized at management's discretion, and the timing of purchases and the exact amount of common equity that may be repurchased is subject to various factors, including market conditions; legal and regulatory considerations affecting the amount and timing of repurchase activity; the Firm's capital position (taking into account goodwill and intangibles); internal capital generation; and alternative investment opportunities. The repurchase program does not include specific price targets or timetables; may be executed through open market purchases or privately negotiated transactions, or utilizing Rule 10b5-1 programs; and may be suspended at any time.

For additional information regarding repurchases of the Firm's equity securities, see Part II, Item 5: Market for registrant's common equity, related stockholder matters and issuer purchases of equity securities on page 20 of JPMorgan Chase's 2015 Form 10-K.

# Preferred Stock

Preferred stock dividends declared were \$411 million and \$823 million for the three and six months ended June 30, 2016.

For additional information on the Firm's preferred stock, see Note 22 of JPMorgan Chase's 2015 Annual Report.

# Other capital requirements

**TLAC** 

In November 2015, the Financial Stability Board ("FSB") finalized the Total Loss Absorbing Capacity ("TLAC") standard for GSIBs, which establishes the criteria for TLAC eligible debt and capital instruments and defines the minimum requirements for amounts of loss absorbing and recapitalization capacity. This amount and type of debt and capital instruments is intended to effectively absorb losses, as necessary, upon the failure of a GSIB, without imposing such losses on taxpayers of the relevant jurisdiction or causing severe systemic disruptions, and thereby ensuring the continuity of the GSIB's critical functions. The final standard will require GSIBs to meet a common minimum TLAC requirement beginning January 1, 2019.

On October 30, 2015, the Federal Reserve issued proposed rules that would require the top-tier holding companies of eight U.S. global systemically important bank holding companies, including the Firm, among other things, to maintain minimum levels of eligible TLAC and long-term debt satisfying certain eligibility criteria ("eligible LTD") commencing January 1, 2019. These proposed TLAC rules would disqualify from eligible LTD, among other instruments, senior debt securities that permit acceleration for reasons other than insolvency or payment default, as well as structured notes and debt securities not governed by U.S. law. The Firm is awaiting the publication of the final rules to determine the full impact on the amount of eligible LTD the Firm will need to issue to be compliant.

For additional information on TLAC, see Capital Management on page 156 of JPMorgan Chase's 2015 Annual Report.

### Broker-dealer regulatory capital

JPMorgan Chase's principal U.S. broker-dealer subsidiaries are JPMorgan Securities and J.P. Morgan Clearing Corp. ("JPMorgan Clearing"). JPMorgan Clearing is a subsidiary of JPMorgan Securities and provides clearing and settlement services. JPMorgan Securities and JPMorgan Clearing are each subject to Rule 15c3-1 under the Securities Exchange Act of 1934 (the "Net Capital Rule"). JPMorgan Securities and JPMorgan Clearing are also each registered as futures commission merchants and subject to Rule 1.17 of the Commodity Futures Trading Commission ("CFTC"). JPMorgan Securities and JPMorgan Clearing have elected to compute their minimum net capital requirements in accordance with the "Alternative Net Capital Requirements" of the Net Capital Rule. At June 30, 2016, JPMorgan Securities' net capital, as defined by the Net Capital Rule, was \$13.6 billion, exceeding the minimum requirement by \$11.0 billion, and JPMorgan Clearing's net capital was \$7.2 billion, exceeding the minimum requirement by \$5.6 billion.

In addition to its minimum net capital requirement, JPMorgan Securities is required to hold tentative net capital in excess of \$1.0 billion and is also required to notify the Securities and Exchange Commission ("SEC") in the event that tentative net capital is less than \$5.0 billion, in accordance with the market and credit risk standards of Appendix E of the Net Capital Rule. As of June 30, 2016, JPMorgan Securities had tentative net capital in excess of the minimum and notification requirements.

J.P. Morgan Securities plc is a wholly-owned subsidiary of JPMorgan Chase Bank, N.A. and is the Firm's principal operating subsidiary in the U.K. It has authority to engage in banking, investment banking and broker-dealer activities. J.P. Morgan Securities plc is jointly regulated by the U.K. Prudential Regulation Authority ("PRA") and Financial Conduct Authority ("FCA"). J.P. Morgan Securities plc is subject to the European Union Capital Requirements Regulation and U.K. PRA capital rules, which implement Basel III.

At June 30, 2016, J.P. Morgan Securities plc had estimated total capital of \$34.4 billion; its estimated CET1 capital ratio was 14.2% and its estimated Total capital ratio was 18.0%. Both capital ratios exceeded the minimum standards of 4.5% and 8.0%, respectively, under the transitional requirements of the European Union's Basel III Capital Requirements Directive and Regulation, as well as the additional capital requirements specified by the PRA.

#### LIQUIDITY

**RISK** 

#### **MANAGEMENT**

Liquidity risk is the risk that the Firm will be unable to meet its contractual and contingent obligations or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets. The following discussion of JPMorgan Chase's Liquidity Risk Management should be read in conjunction with pages 159–164 of JPMorgan Chase's 2015 Annual Report.

### LCR and NSFR

The U.S. LCR rule requires the Firm to measure the amount of HQLA held by the Firm in relation to estimated net cash outflows within a 30-day period during an acute stress event. The LCR was required to be 90% at January 1, 2016, increasing to a minimum of 100% on January 1, 2017 onward. At June 30, 2016, the Firm was compliant with the fully phased-in U.S. LCR.

The Basel Committee final standard for the net stable funding ratio ("Basel NSFR") is intended to measure the "available" amount of stable funding over a one-year horizon. Basel NSFR will become a minimum standard by January 1, 2018 and requires that this ratio be equal to at least 100% on an ongoing basis.

On April 26, 2016, the U.S. NSFR proposal was released for large banks and bank holding companies and was largely consistent with Basel NSFR. The proposed requirement would apply beginning on January 1, 2018, consistent with the Basel NSFR timeline.

The Firm estimates it was compliant with the proposed U.S. NSFR based on data as of March 31, 2016, and on its current understanding of the proposed rule.

#### **HOLA**

HQLA is the amount of assets that qualify for inclusion in the U.S. LCR. HQLA primarily consists of cash and certain unencumbered high quality liquid assets as defined in the final rule.

On April 1, 2016, the Federal Reserve published a final rule permitting investment-grade, U.S. general obligation state and municipal securities that meet certain criteria to be included in HQLA for purposes of the U.S. LCR, subject to certain limits. The final rule became effective beginning July 1, 2016, and did not have a material effect on the Firm's HQLA or LCR.

As of June 30, 2016, the Firm's HQLA was \$516 billion, compared with \$496 billion as of December 31, 2015. The increase in HQLA primarily reflects deposit growth in excess of loan growth. HQLA may fluctuate from period to period primarily due to normal flows from client activity.

The following table presents HQLA included in the LCR, broken out by HQLA-eligible cash and securities as of June 30, 2016.

June (in billions) 30,

2016

**HQLA** 

Eligible cash<sup>(a)</sup> \$303 Eligible securities<sup>(b)</sup> 213 Total HQLA \$516

(a) Cash on deposit at central banks.

Predominantly includes U.S. agency mortgage-backed securities, U.S. Treasuries, and sovereign bonds net of applicable haircuts under U.S. LCR rules.

In addition to HQLA, as of June 30, 2016, the Firm has approximately \$234 billion of unencumbered marketable securities, such as equity securities and fixed income debt securities, available to raise liquidity, if required. Furthermore, the Firm maintains borrowing capacity at various Federal Home Loan Banks ("FHLBs"), the Federal Reserve Bank discount window and various other central banks as a result of collateral pledged by the Firm to such banks. Although available, the Firm does not view the borrowing capacity at the Federal Reserve Bank discount window and the various other central banks as a primary source of liquidity. As of June 30, 2016, the Firm's remaining borrowing capacity at various FHLBs and the Federal Reserve Bank discount window was approximately \$196

billion. This remaining borrowing capacity excludes the benefit of securities included above in HQLA or other unencumbered securities currently held at the Federal Reserve Bank discount window for which the Firm has not drawn liquidity.

## **Funding**

Sources of funds

Management believes that the Firm's unsecured and secured funding capacity is sufficient to meet its on- and off-balance sheet obligations.

The Firm funds its global balance sheet through diverse sources of funding including a stable deposit franchise as well as secured and unsecured funding in the capital markets. The Firm's loan portfolio (\$872.8 billion at June 30, 2016), is funded with a portion of the Firm's deposits (\$1,331.0 billion at June 30, 2016), and through securitizations and, with respect to a portion of the Firm's real estate-related loans, with secured borrowings from the FHLBs. Deposits in excess of the amount utilized to fund loans are primarily invested in the Firm's investment securities portfolio or deployed in cash or

other short-term liquid investments based on their interest rate and liquidity risk characteristics. Securities borrowed or purchased under resale agreements and trading assets- debt and equity instruments are primarily funded by the Firm's securities loaned or sold under agreements to repurchase, trading liabilities—debt and equity instruments, and a portion of the Firm's long-term debt and stockholders' equity. In addition to funding securities borrowed or purchased under resale agreements and trading assets-debt and equity instruments, proceeds from the Firm's debt and equity issuances are used to fund certain loans and other financial and non-financial assets, or may be invested in the Firm's investment securities portfolio. See the discussion below for additional information relating to Deposits, Short-term funding, and Long-term funding and issuance.

## **Deposits**

The table below summarizes, by line of business, the deposit balances as of June 30, 2016, and December 31, 2015, and the average deposit balances for the three and six months ended June 30, 2016 and 2015, respectively.

			Three months ended		Six months ended Jun	
	June 30,	December 31,	June 30,		30,	
Deposits	2016	2015	Average		Average	
(in millions)			2016	2015	2016	2015
Consumer & Community Banking	\$586,074	\$ 557,645	\$583,115	\$529,448	\$572,699	\$520,850
Corporate & Investment Bank	418,416	395,228	407,084	412,859	399,853	429,154
Commercial Banking	171,944	172,470	169,090	186,078	170,105	191,711
Asset Management	148,967	146,766	151,214	152,563	150,915	155,386
Corporate	5,557	7,606	5,463	18,197	6,046	20,625
Total Firm	\$1,330,958	3\$ 1,279,715	\$1,315,960	5\$1,299,145	\$1,299,618	3\$1,317,726

A key strength of the Firm is its diversified deposit franchise, through each of its lines of business, which provides a stable source of funding and limits reliance on the wholesale funding markets. A significant portion of the Firm's deposits are consumer deposits which are considered a stable source of liquidity. Additionally, the majority of the Firm's wholesale operating deposits are also considered to be relatively stable sources of liquidity because they are generated from customers that maintain operating service relationships with the Firm.

As of June 30, 2016, the Firm's loans-to-deposits ratio was 66%, compared with 65% at December 31, 2015. Total deposits for the Firm were \$1,331.0 billion as of June 30, 2016, compared with \$1,279.7 billion at December 31, 2015 (60% and 61% of total liabilities at June 30, 2016, and December 31, 2015, respectively). The increase was attributable to higher consumer and wholesale deposits. The increase in consumer deposits was due to continued growth from new and existing customers, as well as the impact of low attrition rates. The increase in wholesale deposits was mainly driven by growth in client activity in CIB's Treasury Services business.

The Firm has typically experienced higher customer deposit inflows at quarter-ends. Therefore, the Firm believes average deposit balances are generally more representative of deposit trends. The increase in the average deposits for the three months ended June 30, 2016, compared with the three months ended June 30, 2015, was driven by an increase in consumer deposits, largely offset by a decrease in wholesale deposits reflecting the Firm's actions in 2015

to reduce non-operating deposits. The decrease in the average deposits for the six months ended June 30, 2016, compared with the six months ended June 30, 2015, was driven by a decrease in wholesale deposits reflecting the Firm's actions in 2015 to reduce non-operating deposits, predominantly offset by an increase in consumer deposits. For further discussions of deposit and liability balance trends, see the discussion of the Firm's Business Segment Results and the Consolidated Balance Sheets Analysis on pages 18–39 and pages 12–13, respectively.

The following table summarizes short-term and long-term funding, excluding deposits, as of June 30, 2016, and December 31, 2015, and average balances for the three and six months ended June 30, 2016 and 2015, respectively. For additional information, see the Consolidated Balance Sheets Analysis on pages 12–13 and Note 12.

			Three months		Six months ended	
	June 30,	December 31	1, ended June 30,		June 30,	
Sources of funds (excluding deposits)	2016	2015	Average		Average	
(in millions)			2016	2015	2016	2015
Commercial paper:						
Wholesale funding	\$17,279	\$ 15,562	\$17,462	\$18,144	\$17,499	\$19,923
Client cash management	_		_	30,876 <sup>(g)</sup>	_	34,563
Total commercial paper	\$17,279	\$ 15,562	\$17,462	\$49,020	\$17,499	\$54,486
Obligations of Firm-administered multi-seller	\$5,357	\$ 8,724	\$5,327	\$11,943	\$5,914	\$11,709
conduits <sup>(a)</sup>	\$5,557	\$ 6,724	\$5,321	\$11,943	\$5,914	\$11,709
Other borrowed funds	\$19,945	\$ 21,105	\$20,107	\$31,673	\$20,169	\$31,559
Securities loaned or sold under agreements to						
repurchase:						
Securities sold under agreements to repurchase	\$151,11	1\$ 129,598	\$158,142	2\$174,724	\$154,330	0\$174,404
Securities loaned	11,943	18,174	15,132	20,616	15,741	21,601
Total securities loaned or sold under agreements to repurchase $^{(b)(c)}$	\$163,054	4\$ 147,772	\$173,274	4\$195,340	\$170,07	1\$196,005
Senior notes	\$156,734	4\$ 149,964	\$152,240	6\$145,708	\$150,65	7\$145,345
Trust preferred securities	3,966	3,969	3,969	3,997	3,970	4,719
Subordinated debt	23,770	25,027	25,176	27,316	25,271	28,257
Structured notes	36,087	32,813	35,602	31,057	34,576	30,738
Total long-term unsecured funding	\$220,55	7\$ 211,773	\$216,993	3\$208,078	\$214,474	4\$209,059
Credit card securitization <sup>(a)</sup>	\$28,955	\$ 27,906	\$27,014	\$31,976	\$27,356	\$31,272
Other securitizations <sup>(d)</sup>	1,641	1,760	1,700	1,941	1,729	1,974
FHLB advances	69,526	71,581	69,528	69,830	70,384	67,163
Other long-term secured funding <sup>(e)</sup>	5,544	5,297	5,205	4,354	5,085	4,339
Total long-term secured funding	\$105,666	6\$ 106,544	\$103,447	7\$108,101	\$104,554	4\$104,748
Preferred stock <sup>(f)</sup>	\$26,068	\$ 26,068	\$26,068	\$23,476	\$26,068	\$22,158
Common stockholders' equityf)	\$226,355	5\$ 221,505	\$224,429	9\$213,738	\$222,993	5\$213,049

<sup>(</sup>a) Included in beneficial interests issued by consolidated variable interest entities on the Firm's Consolidated balance sheets.

Excluded long-term structured repurchase agreements of \$1.8 billion and \$4.2 billion as of June 30, 2016, and December 31, 2015, respectively, and average balances of \$2.7 billion and \$3.7 billion for the three months ended

Other securitizations include securitizations of student loans. The Firm's wholesale businesses also securitize loans

- (d) for client-driven transactions, which are not considered to be a source of funding for the Firm and are not included in the table.
- (e) Includes long-term structured notes which are secured.
- (f) For additional information on preferred stock and common stockholders' equity see Capital Management on pages 63–69 and the Consolidated statements of changes in stockholders' equity on page 84; and Note 22 and Note 23 of

<sup>(</sup>b) Excludes federal funds purchased.

<sup>(</sup>c) December 31, 2015, respectively, and average balances of \$2.7 billion and \$3.7 billion for the three months ended June 30, 2016 and 2015, respectively, and \$3.1 billion and \$3.3 billion for the six months ended June 30, 2016 and 2015, respectively.

JPMorgan Chase's 2015 Annual Report.

During the third quarter of 2015 the Firm completed the discontinuation of its commercial paper customer sweep cash management program.

## Short-term funding

The Firm's sources of short-term secured funding primarily consist of securities loaned or sold under agreements to repurchase. Securities loaned or sold under agreements to repurchase are secured predominantly by high-quality securities collateral, including government-issued debt and agency MBS, and constitute a significant portion of the federal funds purchased and securities loaned or sold under repurchase agreements on the Consolidated balance sheets. The increase at June 30, 2016, from December 31, 2015, was due to higher secured financing of investment securities in the Chief Investment Office ("CIO"), and higher client-driven market-making activities in CIB. The decrease in the average balance of securities loaned or sold under

agreements to repurchase for the three and six months ended June 30, 2016, compared with June 30, 2015, was largely due to lower secured financing of trading assets-debt and equity instruments in the CIB related to client-driven market-making activities. The balances associated with securities loaned or sold under agreements to repurchase fluctuate over time due to customers' investment and financing activities; the Firm's demand for financing; the ongoing management of the mix of the Firm's liabilities, including its secured and unsecured financing (for both the investment securities and market-making portfolios); and other market and portfolio factors.

### Long-term funding and issuance

Long-term funding provides additional sources of stable funding and liquidity for the Firm. The Firm's long-term funding plan is driven by expected client activity, liquidity considerations, and regulatory requirements. Long-term funding objectives include maintaining diversification, maximizing market access and optimizing funding costs, as well as maintaining a certain level of liquidity at JPMorgan Chase & Co. (the "Parent Company"). The Firm evaluates various funding markets, tenors and currencies in creating its optimal long-term funding plan.

The significant majority of the Firm's long-term unsecured funding is issued by the Parent Company to provide maximum flexibility in support of both bank and nonbank subsidiary funding. The following table summarizes long-term unsecured issuance and maturities or redemptions for the three and six months ended June 30, 2016 and 2015. For additional information, see Note 21 of JPMorgan Chase's 2015 Annual Report.

Long-term unsecured funding		Three months		Six months	
		ended June 30,		ended June 30,	
(in millions)	2016	2015	2016	2015	
Issuance					
Senior notes issued in the U.S. market	\$5,968	\$3,734	\$13,187	7\$13,586	
Senior notes issued in non-U.S. markets	4,891	3,059	4,891	7,284	
Total senior notes	10,859	6,793	18,078	20,870	
Subordinated debt		1,722		1,722	
Structured notes	5,278	5,696	13,611	12,609	
Total long-term unsecured funding – issuance	\$16,137\$14,21		1\$31,689\$35,201		
Maturities/redemptions					
Senior notes	\$6,499	\$3,524	\$16,310	0\$12,719	
Trust preferred securities		1,500		1,500	
Subordinated debt	2,000	2,226	2,002	3,032	
Structured notes	4,437	4,504	8,541	10,324	
Total long-term unsecured funding – maturities/redemption	s\$12,93	5\$11,754	1\$26,853	3\$27,575	

The Firm raises secured long-term funding primarily through securitization of consumer credit card loans and advances from the FHLBs. The following table summarizes the securitization issuance and FHLB advances and their respective maturities or redemptions for the three and six months ended June 30, 2016 and 2015, respectively.

	Three months ended June 30,			Six months ended June 30,				
Long-term secured funding	Issuan	ce	Maturities/	Redemptions	Issuand	ce	Maturities	Redemptions
(in millions)	2016	2015	2016	2015	2016	2015	2016	2015
Credit card securitization	\$3,814	1\$3,650	\$ 2,350	\$ 3,785	\$3,814	\$6,126	\$ 2,775	\$ 6,130
Other securitizations <sup>(a)</sup>	_	_	61	63	_		119	128
FHLB advances	_	7,850	3	2,002		12,550	2,054	5,003
Other long-term secured funding <sup>(b)</sup>	236	139	46	91	326	263	89	209
Total long-term secured funding	\$4,050	\$11,639	\$ 2,460	\$ 5,941	\$4,140	\$18,939	\$ 5,037	\$ 11,470
	• . •							

<sup>(</sup>a) Other securitizations includes securitizations of student loans.

The Firm's wholesale businesses also securitize loans for client-driven transactions; those client-driven loan securitizations are not considered to be a source of funding for the Firm and are not included in the table above. For further description of the client-driven loan securitizations, see Note 16 of JPMorgan Chase's 2015 Annual Report. Credit ratings

The cost and availability of financing are influenced by credit ratings. Reductions in these ratings could have an adverse effect on the Firm's access to liquidity sources, increase the cost of funds, trigger additional collateral or funding requirements and decrease the number of investors and counterparties willing to lend to the Firm.

<sup>(</sup>b) Includes long-term structured notes which are secured.

Additionally, the Firm's funding requirements for VIEs and other third party commitments may be adversely affected by a decline in credit ratings. For additional information on the impact of a credit ratings downgrade on the funding requirements for VIEs, and on derivatives and collateral agreements, see Special-purpose entities on page 14, and credit risk, liquidity risk and credit-related contingent features in Note 5.

The credit ratings of the Parent Company and the Firm's principal bank and nonbank subsidiaries as of June 30, 2016, were as follows.

	JPMorgan C	Chase & Co.	JPMorgan Chase Bank, N.A. Chase Bank USA, N.A.			J.P. Morgan Securities LLC				
June 30,	Long-term	Short-term	Outlook	Long-term	Short-term	Outlook	Long-term	Short-term	1 Outlook	
2016	issuer	issuer	Outlook	issuer	issuer	Outlook	issuer	issuer	Outlook	
Moody's	A3	P-2	Stable	Aa3	P-1	Stable	Aa3	P-1	Stable	
Standard & Poor's	A-	A-2	Stable	A+	A-1	Stable	A+	A-1	Stable	
Fitch Ratings	A+	F1	Stable	AA-	F1+	Stable	AA-	F1+	Stable	

Downgrades of the Firm's long-term ratings by one or two notches could result in an increase in its cost of funds, and access to certain funding markets could be reduced as noted above. The nature and magnitude of the impact of ratings downgrades depends on numerous contractual and behavioral factors (which the Firm believes are incorporated in its liquidity risk and stress testing metrics). The Firm believes that it maintains sufficient liquidity to withstand a potential decrease in funding capacity due to ratings downgrades.

JPMorgan Chase's unsecured debt does not contain requirements that would call for an acceleration of payments, maturities or changes in the structure of the existing debt, provide any limitations on future borrowings or require additional collateral, based on unfavorable changes in the Firm's credit ratings, financial ratios, earnings, or stock price.

Critical factors in maintaining high credit ratings include a stable and diverse earnings stream, strong capital ratios, strong credit quality and risk management controls, diverse funding sources, and disciplined liquidity monitoring procedures. Rating agencies continue to evaluate economic and geopolitical trends, regulatory developments, future profitability, risk management practices, and litigation matters, as well as their broader ratings methodologies. Changes in any of these factors could lead to changes in the Firm's credit ratings.

Although the Firm closely monitors and endeavors to manage, to the extent it is able, factors influencing its credit ratings, there is no assurance that its credit ratings will not be changed in the future.

#### **SUPERVISION**

**AND** 

#### REGULATION

For further information on Supervision and Regulation, see the Supervision and regulation section on pages 1–8 of JPMorgan Chase's 2015 Form 10-K.

For more information about the applicable requirements relating to risk-based capital and leverage in the U.S. under Basel III, see Capital Management on pages 63–69 and

Note 20.

Under Basel III, bank holding companies and banks are required to measure their liquidity against two specific liquidity tests: the LCR and the NSFR. For additional information on these ratios, see Liquidity Risk Management on pages 70–74.

For additional information on the Firm's CCAR, see Capital Management on pages 63–69.

For further information on the current and potential impact of the Basel III framework, including GSIB requirements, and TLAC, see Capital Management on pages 63–69.

For information on the net capital of J.P. Morgan Securities LLC and J.P. Morgan Clearing Corp., and the applicable requirements relating to risk-based capital for J.P. Morgan Securities plc, see Capital Management on pages 63–69. Dividends

At June 30, 2016, JPMorgan Chase estimated that its banking subsidiaries could pay, in the aggregate, approximately \$29 billion in dividends to their respective bank holding companies without the prior approval of their relevant banking regulators.

CRITICAL ACCOUNTING ESTIMATES USED BY THE FIRM

JPMorgan Chase's accounting policies and use of estimates are integral to understanding its reported results. The Firm's most complex accounting estimates require management's judgment to ascertain the appropriate carrying value of assets and liabilities. The Firm has established policies and control procedures intended to ensure that estimation methods, including any judgments made as part of such methods, are well-controlled, independently reviewed and applied consistently from period to period. The methods used and judgments made reflect, among other factors, the nature of the assets or liabilities and the related business and risk management strategies, which may vary across the Firm's businesses and portfolios. In addition, the policies and procedures are intended to ensure that the process for changing methodologies occurs in an appropriate manner. The Firm believes its estimates for determining the carrying value of its assets and liabilities are appropriate. The following is a brief description of the Firm's critical accounting estimates involving significant judgments.

### Allowance for credit losses

JPMorgan Chase's allowance for credit losses covers the retained consumer and wholesale loan portfolios, as well as the Firm's wholesale and certain consumer lending-related commitments. The allowance for loan losses is intended to adjust the carrying value of the Firm's loan assets to reflect probable credit losses inherent in the loan portfolio as of the balance sheet date. Similarly, the allowance for lending-related commitments is established to cover probable credit losses inherent in the lending-related commitments portfolio as of the balance sheet date. For further discussion of the methodologies used in establishing the Firm's allowance for credit losses and the significant judgments involved, see Allowance for credit losses on pages 130–132, 165–167 and Note 15 of JPMorgan Chase's 2015 Annual Report; for amounts recorded as of June 30, 2016 and 2015, see Allowance for credit losses on pages 55–57 and Note 14 of this Form 10-Q.

As noted in the discussion on pages 165–167 of JPMorgan Chase's 2015 Annual Report, the Firm's allowance for credit losses is sensitive to numerous factors, which may differ depending on the portfolio. Changes in economic conditions or in the Firm's assumptions and estimates could affect its estimate of probable credit losses inherent in the portfolio at the balance sheet date. The Firm uses its best judgment to assess these economic conditions and loss data in estimating the allowance for credit losses and these estimates are subject to periodic refinement based on any changes to underlying external and Firm-specific historical data. In many cases, the use of alternate estimates (for example, the effect of home prices and unemployment rates on consumer delinquency, or the calibration between the Firm's wholesale loan risk ratings and external credit ratings) or data sources (for example, external probability of default ("PD") and loss given default ("LGD") factors that incorporate industry-wide information, versus Firm-specific history) would result in a different estimated allowance for credit losses. To illustrate the potential magnitude of

certain alternate judgments, the Firm estimates that changes in the following inputs would have the following effects on the Firm's modeled credit loss estimates as of June 30, 2016, without consideration of any offsetting or correlated effects of other inputs in the Firm's allowance for loan losses:

For PCI loans, a combined 5% decline in housing prices and a 1% increase in unemployment rates from current levels could imply an increase to modeled credit loss estimates of approximately \$600 million.

For the residential real estate portfolio, excluding PCI loans, a combined 5% decline in housing prices and a 1% increase in unemployment rates from current levels could imply an increase to modeled annual loss estimates of approximately \$150 million.

• A 50 basis point deterioration in forecasted credit card loss rates could imply an increase to modeled annualized credit card loan loss estimates of approximately \$675 million.

An increase in PD factors consistent with a one-notch downgrade in the Firm's internal risk ratings for its entire wholesale loan portfolio could imply an increase in the Firm's modeled credit loss estimates of approximately \$1.9 billion.

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A 100 basis point increase in estimated LGD for the Firm's entire wholesale loan portfolio could imply an increase in the Firm's modeled credit loss estimates of approximately \$175 million.

The purpose of these sensitivity analyses is to provide an indication of the isolated impacts of hypothetical alternative assumptions on modeled loss estimates. The changes in the inputs presented above are not intended to imply management's expectation of future deterioration of those risk factors. In addition, these analyses are not intended to estimate changes in the overall allowance for loan losses, which would also be influenced by the judgment management applies to the modeled loss estimates to reflect the uncertainty and imprecision of these modeled loss estimates based on then-current circumstances and conditions.

It is difficult to estimate how potential changes in specific factors might affect the overall allowance for credit losses because management considers a variety of factors and inputs in estimating the allowance for credit losses. Changes in these factors and inputs may not occur at the same rate and may not be consistent across all geographies or product types, and changes in factors may be directionally inconsistent, such that improvement in one factor may offset deterioration in other factors. In addition, it is difficult to predict how changes in specific economic conditions or assumptions could affect borrower behavior or other factors considered by management in estimating the allowance for credit losses. Given the process the Firm follows and the judgments made in evaluating the risk factors related to its loss estimates, management believes that its current estimate of the allowance for credit losses is appropriate.

Fair value of financial instruments, MSRs and commodities inventory

Assets measured at fair value

The following table includes the Firm's assets measured at fair value and the portion of such assets that are classified within level 3 of the valuation hierarchy. For further information, see Note 3.

June 30, 2016 (in billions, except ratio data)	Total assets at fair value	Total level assets	3
Trading debt and equity instruments	\$302.3	\$9.7	
Derivative receivables <sup>(a)</sup>	78.4	7.3	
Trading assets	380.7	17.0	
AFS securities	224.8	0.8	
Loans	1.9	0.8	
MSRs	5.1	5.1	
Private equity investments <sup>(b)</sup>	1.7	1.7	
Other	28.0	0.7	
Total assets measured at fair value on a recurring basis	642.2	26.1	
Total assets measured at fair value on a nonrecurring basis	0.8	0.5	
Total assets measured at fair value	\$643.0	\$26.6	5
Total Firm assets	\$2,466.1		
Level 3 assets as a percentage of total Firm assets <sup>(a)</sup>		1.1	%
Level 3 assets as a percentage of total Firm assets at fair value <sup>(a)</sup>		4.1	%

For purposes of table above, the derivative receivables total reflects the impact of netting adjustments; however, the \$7.3 billion of derivative receivables classified as level 3 does not reflect the netting adjustment as such netting is

(a) not relevant to a presentation based on the transparency of inputs to the valuation of an asset. However, if the Firm were to net such balances within level 3, the reduction in the level 3 derivative receivables balance would be \$1.6 billion at June 30, 2016; this is exclusive of the netting benefit associated with cash collateral, which would further reduce the level 3 balances.

(b) Private equity instruments represent investments within Corporate.

### Valuation

Estimating fair value requires the application of judgment. The type and level of judgment required is largely dependent on the amount of observable market information available to the Firm. For instruments valued using internally developed models that use significant unobservable inputs and are therefore classified within level 3 of the valuation hierarchy, judgments used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2.

In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate model to use. Second, the lack of observability of certain significant inputs requires management to assess all relevant empirical data in deriving valuation inputs — including, for example, transaction details, yield curves, interest rates, prepayment rates, default rates, volatilities, correlations, equity or debt prices, valuations of comparable instruments, foreign exchange rates and credit curves. For further discussion of the valuation of level 3 instruments, including unobservable inputs used, see

Note 3.

For instruments classified in levels 2 and 3, management judgment must be applied to assess the appropriate level of valuation adjustments to reflect counterparty credit quality,

the Firm's credit-worthiness, market funding rates, liquidity considerations, unobservable parameters, and for portfolios that meet specified criteria, the size of the net open risk position. The judgments made are typically affected by the type of product and its specific contractual terms, and the level of liquidity for the product or within the market as a whole. For further discussion of valuation adjustments applied by the Firm, see Note 3.

Imprecision in estimating unobservable market inputs or other factors can affect the amount of gain or loss recorded for a particular position. Furthermore, while the Firm believes its valuation methods are appropriate and consistent

with those of other market participants, the methods and assumptions used reflect management judgment and may vary across the Firm's businesses and portfolios.

The Firm uses various methodologies and assumptions in the determination of fair value. The use of methodologies or assumptions different than those used by the Firm could result in a different estimate of fair value at the reporting date. For a detailed discussion of the Firm's valuation process and hierarchy, and its determination of fair value for individual financial instruments, see Note 3.

## Goodwill impairment

Management applies significant judgment when testing goodwill for impairment. For a description of the significant valuation judgments associated with goodwill impairment, see Goodwill impairment on page 168 of JPMorgan Chase's 2015 Annual Report.

For the three months ended June 30, 2016, the Firm reviewed current conditions (including the estimated effects of regulatory and legislative changes and the current estimated market cost of equity) and prior projections of business performance for all its businesses. Based upon such reviews, the Firm concluded that the goodwill allocated to its reporting units was not impaired as of June 30, 2016.

Declines in business performance, increases in credit losses, increases in equity capital requirements, as well as deterioration in economic or market conditions, adverse estimates of the impact of regulatory or legislative changes or increases in the estimated market cost of equity, could cause the estimated fair values of the Firm's reporting units or their associated goodwill to decline in the future, which could result in a material impairment charge to earnings in a future period related to some portion of the associated goodwill.

For additional information on goodwill, see Note 16.

Income taxes

For a description of the significant assumptions, judgments and interpretations associated with the accounting for income taxes, see Income taxes on page 169 of JPMorgan Chase's 2015 Annual Report.

Litigation reserves

For a description of the significant estimates and judgments associated with establishing litigation reserves, see Note 23 of this Form 10-Q, and Note 31 of JPMorgan Chase's 2015 Annual Report.

# **ACCOUNTING** AND REPORTING **DEVELOPMENTS**

Financial Accounting Standards Board ("FASB") Standards Adopted since January 1, 2016

#### Standard

Amendments to the consolidation analysis

Improvements to employee share-based payment accounting

Measuring the financial assets and financial liabilities of a consolidated collateralized financing entity

Recognition and measurement of financial assets and financial liabilities -DVA to OCI

Summary of guidance

- Eliminates the deferral issued by the FASB in February 2010 of VIE-related accounting requirements for certain investment funds, including mutual funds, private equity funds and hedge funds.
- Amends the evaluation of fees paid to a decision-maker or a service provider, and exempts certain money market funds from consolidation.
- Requires that all excess tax benefits and tax deficiencies that pertain to employee stock-based incentive payments be recognized within income tax expense in the Consolidated statements of income, rather than within additional paid-in capital.
- Provides an alternative for consolidated financing VIEs to Adopted January 1, 2016. elect: (1) to measure their financial assets and liabilities separately under existing U.S. GAAP for fair value measurement with any differences in such fair values reflected in earnings; or (2) to measure both their financial assets and liabilities using the more observable of the fair value of the financial assets or the fair value of the financial liabilities.
- For financial liabilities where the fair value option has been elected, the portion of the total change in fair value caused by changes in the Firm's own credit risk (i.e., DVA) is required to be presented separately in other comprehensive income ("OCI").
- Requires a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption.

Effects on financial statements

- Adopted January 1, 2016.
- There was no material impact on the Firm's Consolidated Financial Statements.
- For further information, see Note 1.
- Adopted January 1, 2016.
- There was no material impact on the Firm's Consolidated Financial Statements.
- There was no material impact on the Firm's Consolidated Financial Statements as the Firm has historically measured the financial assets and liabilities using the more observable fair value.
- Adopted January 1, 2016.
- There was no material impact on the Firm's Consolidated Financial Statements.
- For additional information about the impact of the adoption of the new accounting guidance, see Notes 3, 4 and 19.

# FASB Standards Issued but not yet Adopted

#### Standard

# Summary of guidance

- Requires that revenue from contracts with customers be recognized upon transfer of control of a good or service in the amount of consideration expected to be received. • Changes the accounting for certain Revenue
  - contract costs, including whether they may be offset against revenue in the statements of income, and requires additional disclosures about revenue and contract costs.

Issued May 2014

recognition -

revenue from

contracts with

customers

• May be adopted using a full retrospective approach or a modified, cumulative effect-type approach wherein the guidance is applied only to existing contracts as of the date of initial application, and to new contracts transacted after that date.

Recognition and measurement of financial assets and financial liabilities

**Issued January** 2016

Leases

# **Issued February** 2016

Financial losses

Issued June 2016

• Requires that certain equity instruments be measured at fair value, with changes in fair value recognized in earnings.

- Generally requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption.
- Requires lessees to recognize all leases longer than twelve months on the Consolidated balance sheets as lease liabilities with corresponding right-of-use assets.
- Requires lessees and lessors to classify most leases using principles similar to existing lease accounting, but eliminates the "bright line" classification tests.
- Requires lessees and lessors to expand qualitative and quantitative disclosures regarding their leasing arrangements.
- Replaces existing incurred loss instruments - credit impairment guidance and establishes a single allowance framework for financial assets carried at amortized cost (including held-to-maturity securities), which will reflect management's estimate of credit losses over the full remaining expected life of the financial assets.

#### Effects on financial statements

- Required effective date: January 1, 2018<sup>(a)</sup>
- Because the guidance does not apply to revenue associated with financial instruments, including loans and securities that are accounted for under other U.S. GAAP, the Firm does not expect the new revenue recognition guidance to have a material impact on the elements of its statements of income most closely associated with financial instruments, including securities gains, interest income and interest expense.
- The Firm plans to adopt the revenue recognition guidance in the first quarter of 2018 and is currently evaluating the potential impact on the Consolidated Financial Statements and its selection of transition method.
- Required effective date: January 1, 2018.
- The Firm is currently evaluating the potential impact on the Consolidated Financial Statements.

- Required effective date: January 1, 2019(a)
- The Firm is currently evaluating the potential impact on the Consolidated Financial Statements.
- Required effective date: January 1, 2020(b)
- The Firm expects that the new guidance will result in an increase in its allowance for credit losses due to several factors, including:

The allowance related to the Firm's loans and commitments will increase to cover credit losses over the full remaining expected life of the portfolio, and will consider expected future changes in

- Eliminates existing guidance for PCI loans, and requires recognition of an allowance for expected credit losses on financial assets purchased with more than insignificant credit deterioration since origination.
- available-for-sale securities to incorporate of impairment losses in the event that the credit of an issuer improves.
- retained earnings as of the beginning of the reporting period of adoption.
- (a) Early adoption is permitted.

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(b) Early adoption is permitted on January 1, 2019.

macroeconomic conditions

The nonaccretable difference on PCI loans will be recognized as an allowance, offset by an increase in the carrying value of the related loans 3.

• Amends existing impairment guidance for An allowance will be established for estimated credit losses on HTM securities

- an allowance, which will allow for reversals The extent of the increase is under evaluation, but will depend upon the nature and characteristics of the Firm's portfolio at the adoption date, and the
- Requires a cumulative-effect adjustment tomacroeconomic conditions and forecasts at that date.

# FORWARD-LOOKING

#### **STATEMENTS**

From time to time, the Firm has made and will make forward-looking statements. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipate," "target," "expect," "estimate," "intend," "plan," "goal," "believe," or other words of similar meaning. Forward-looking statements provide JPMorgan Chase's current expectations or forecasts of future events, circumstances, results or aspirations. JPMorgan Chase's disclosures in this Form 10-Q contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The Firm also may make forward-looking statements in its other documents filed or furnished with the Securities and Exchange Commission. In addition, the Firm's senior management may make forward-looking statements orally to investors, analysts, representatives of the media and others.

All forward-looking statements are, by their nature, subject to risks and uncertainties, many of which are beyond the Firm's control. JPMorgan Chase's actual future results may differ materially from those set forth in its forward-looking statements. While there is no assurance that any list of risks and uncertainties or risk factors is complete, below are certain factors which could cause actual results to differ from those in the forward-looking statements:

• Local, regional and global business, economic and political conditions and geopolitical events;

Changes in laws and regulatory requirements, including capital and liquidity requirements affecting the Firm's businesses, and the ability of the Firm to address those requirements;

Changes in trade, monetary and fiscal policies and laws;

Changes in income tax laws and regulations (including the adoption, as currently proposed, of Treasury regulations under Section 385 of the U.S. Internal Revenue Code);

Securities and capital markets behavior, including changes in market liquidity and volatility;

Changes in investor sentiment or consumer spending or savings behavior;

Ability of the Firm to manage effectively its capital and liquidity, including approval of its capital plans by banking regulators;

Changes in credit ratings assigned to the Firm or its subsidiaries;

Damage to the Firm's reputation;

Ability of the Firm to deal effectively with an economic slowdown or other economic or market disruption;

Technology changes instituted by the Firm, its counterparties or competitors;

The success of the Firm's business simplification initiatives and the effectiveness of its control agenda;

Ability of the Firm to develop new products and services, and the extent to which products or services previously sold by the Firm (including but not limited to mortgages and asset-backed securities) require the Firm to incur liabilities or absorb losses not contemplated at their initiation or origination;

Acceptance of the Firm's new and existing products and services by the marketplace and the ability of the Firm to innovate and to increase market share;

Ability of the Firm to attract and retain qualified employees;

Ability of the Firm to control expense;

Competitive pressures;

Changes in the credit quality of the Firm's customers and counterparties:

Adequacy of the Firm's risk management framework, disclosure controls and procedures and internal control over financial reporting;

Adverse judicial or regulatory proceedings;

Changes in applicable accounting policies;

Ability of the Firm to determine accurate values of certain assets and liabilities;

Occurrence of natural or man-made disasters or calamities or conflicts and the Firm's ability to deal effectively with disruptions caused by the foregoing;

Ability of the Firm to maintain the security and integrity of its financial, accounting, technology, data processing and other operating systems and facilities;

Ability of the Firm to effectively defend itself against cyberattacks and other attempts by unauthorized parties to access the Firm's information or disrupt its systems; and

The other risks and uncertainties detailed in Part I,

Item 1A: Risk Factors in the Firm's Annual Report on Form 10-K for the year ended December 31, 2015. Any forward-looking statements made by or on behalf of the Firm speak only as of the date they are made, and JPMorgan Chase does not undertake to update forward-looking statements to reflect the impact of circumstances or events that arise after the date the forward-looking statements were made. The reader should, however, consult any further disclosures of a forward-looking nature the Firm may make in any subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, or Current Reports on Form 8-K.

# JPMorgan Chase & Co.

Consolidated statements of income (unaudited)

,	Three months ended June 30,		Six mont June 30,	ths ended
(in millions, except per share data) Revenue	2016	2015	2016	2015
	¢1644	\$1,833	\$2.077	\$3,627
Investment banking fees Principal transactions	2,976	2,834	5,655	6,489
Lending- and deposit-related fees		-	-	-
	1,403	1,418	2,806	2,781
Asset management, administration and commissions	3,681 21	4,015	7,305	7,822
Securities gains <sup>(a)</sup>		44	72	96
Mortgage fees and related income	689	783	1,356	1,488
Card income	1,358	1,615	2,659	3,046
Other income	1,261	586	2,062	1,168
Noninterest revenue		13,128		26,517
Interest income		12,514		25,079
Interest expense	2,466	1,830	4,638	3,718
Net interest income	-		22,727	21,361
Total net revenue	24,380	23,812	47,619	47,878
Provision for credit losses	1,402	935	3,226	1,894
Noninterest expense				
Compensation expense	7,778	7,694	15,438	15,737
Occupancy expense	899	923	1,782	1,856
Technology, communications and equipment expense	1,665	1,499	3,283	2,990
Professional and outside services	1,700	1,768	3,248	3,402
Marketing	672	642	1,375	1,233
Other expense	924	1,974	2,349	4,165
Total noninterest expense	13,638	14,500	27,475	29,383
Income before income tax expense	9,340	8,377	16,918	16,601
Income tax expense	3,140	2,087	5,198	4,397
Net income	\$6,200	\$6,290	\$11,720	
Net income applicable to common stockholders			\$10,656	
Net income per common share data	,		,	,
Basic earnings per share	\$1.56	\$1.56	\$2.92	\$3.02
Diluted earnings per share	1.55	1.54	2.89	2.99
W. data damana hada da	2.625.0	2 707 0	2 (52.0	2.716.6
Weighted-average basic shares	-	*	3,652.9	3,716.6
Weighted-average diluted shares			3,681.7	3,750.5
Cash dividends declared per common share	\$0.48	\$0.44	\$0.92	\$0.84

The Firm recognized other-than-temporary impairment ("OTTI") losses of \$32 million and \$1 million for the three (a) months ended June 30, 2016 and 2015, respectively, and \$38 million and \$2 million for the six months ended June 30, 2016 and 2015, respectively.

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

# JPMorgan Chase & Co.

Consolidated statements of comprehensive income (unaudited)

Three month

	Three months ended		Six month June 30,	ns ended
	June 30	fune 30,		
(in millions)	2016	2015	2016	2015
Net income	\$6,200	\$6,290	\$11,720	\$12,204
Other comprehensive income/(loss), after-tax				
Unrealized gains/(losses) on investment securities	867	(1,419)	1,292	(1,330)
Translation adjustments, net of hedges	3	3	1	(7)
Cash flow hedges	(87)	80	(157)	157
Defined benefit pension and OPEB plans	56	8	81	93
DVA on fair value option elected liabilities	(3)	NA	55	NA
Total other comprehensive income/(loss), after-tax	836	(1,328)	1,272	(1,087)
Comprehensive income	\$7,036	\$4,962	\$12,992	\$11,117

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

Consolidated balance sheets (unaudited)

Consolidated balance sheets (unaudited)		
(in millions, except share data)	Jun 30, 2016	Dec 31, 2015
Assets		
Cash and due from banks	\$19,710	\$20,490
Deposits with banks	345,595	340,015
Federal funds sold and securities purchased under resale agreements (included \$23,349 and \$23,141 at fair value)	237,267	212,575
Securities borrowed (included \$0 and \$395 at fair value)	103,225	98,721
Trading assets (included assets pledged of \$107,779 and \$115,284)	380,793	343,839
Securities (included \$224,799 and \$241,754 at fair value and assets pledged of \$23,789 and	270 (10	200 927
\$14,883)	278,610	290,827
Loans (included \$1,852 and \$2,861 at fair value)	872,804	837,299
Allowance for loan losses	(14,227)	(13,555)
Loans, net of allowance for loan losses	858,577	823,744
Accrued interest and accounts receivable	64,911	46,605
Premises and equipment	14,262	14,362
Goodwill	47,303	47,325
Mortgage servicing rights	5,072	6,608
Other intangible assets	917	1,015
Other assets (included \$7,309 and \$7,604 at fair value and assets pledged of \$1,378 and	100.054	105 572
\$1,286)	109,854	105,572
Total assets <sup>(a)</sup>	\$2,466,096	\$2,351,698
Liabilities	. , ,	, , ,
Deposits (included \$12,292 and \$12,516 at fair value)	\$1,330,958	\$1,279,715
Federal funds purchased and securities loaned or sold under repurchase agreements		
(included \$1,722 and \$3,526 at fair value)	166,044	152,678
Commercial paper	17,279	15,562
Other borrowed funds (included \$9,869 and \$9,911 at fair value)	19,945	21,105
Trading liabilities	158,958	126,897
Accounts payable and other liabilities (included \$4,577 and \$4,401 at fair value)	184,635	177,638
Beneficial interests issued by consolidated variable interest entities (included \$586 and	10.007	
\$787 at fair value)	40,227	41,879
Long-term debt (included \$36,486 and \$33,065 at fair value)	295,627	288,651
Total liabilities <sup>(a)</sup>	2,213,673	2,104,125
Commitments and contingencies (see Notes 21 and 23)		
Stockholders' equity		
Preferred stock (\$1 par value; authorized 200,000,000 shares; issued 2,606,750 shares)	26,068	26,068
Common stock (\$1 par value; authorized 9,000,000,000 shares; issued 4,104,933,895		•
shares)	4,105	4,105
Additional paid-in capital	91,974	92,500
Retained earnings	153,749	146,420
Accumulated other comprehensive income	1,618	192
Shares held in restricted stock units ("RSU") Trust, at cost (472,953 shares)	-	(21)
Treasury stock, at cost (492,951,535 and 441,459,392 shares)		(21,691 )
Total stockholders' equity	252,423	247,573
Total liabilities and stockholders' equity	\$2,466,096	
(a) The following table presents information on assets and liabilities related to VIEs that are		

<sup>(</sup>a) The following table presents information on assets and liabilities related to VIEs that are consolidated by the Firm at June 30, 2016, and December 31, 2015. The difference between total VIE assets and liabilities represents the

Firm's interests in those entities, which were eliminated in consolidation.

(in millions)	Jun 30,	Dec 31,	
(III IIIIIIIOIIS)	2016	2015	
Assets			
Trading assets	\$4,261	\$3,736	
Loans	68,888	75,104	
All other assets	3,546	2,765	
Total assets	\$76,695	\$81,605	
Liabilities			
Beneficial interests issued by consolidated VIEs	\$40,227	\$41,879	
All other liabilities	750	809	
Total liabilities	\$40,977	\$42,688	

The assets of the consolidated VIEs are used to settle the liabilities of those entities. The holders of the beneficial interests do not have recourse to the general credit of JPMorgan Chase. At June 30, 2016, and December 31, 2015, the Firm provided limited program-wide credit enhancements of \$2.0 billion for each period related to its Firm-administered multi-seller conduits, which are eliminated in consolidation. For further discussion, see Note 15. The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

# JPMorgan Chase & Co.

Consolidated statements of changes in stockholders' equity (unaudited)

	Six month June 30,	ns ended	
(in millions, except per share data)	2016	2015	
Preferred stock			
Balance at January 1	\$26,068	\$20,06	53
Issuance of preferred stock		4,855	
Balance at June 30	26,068	24,918	;
Common stock	,	•	
Balance at January 1 and June 30	4,105	4,105	
Additional paid-in capital			
Balance at January 1	92,500	93,270	)
Shares issued and commitments to issue common stock for employee stock-based	(520	\ (700	`
compensation awards, and related tax effects	(539	) (788	)
Other	13	(278	)
Balance at June 30	91,974	92,204	-
Retained earnings			
Balance at January 1	146,420	129,97	7
Cumulative effect of change in accounting principle	(154	) —	
Net income	11,720	12,204	
Dividends declared:			
Preferred stock	(823	) (704	)
Common stock (\$0.92 and \$0.84 per share)	(3,414	) (3,183	)
Balance at June 30	153,749	138,29	4
Accumulated other comprehensive income			
Balance at January 1	192	2,189	
Cumulative effect of change in accounting principle	154	_	
Other comprehensive income/(loss)	1,272	(1,087	)
Balance at June 30	1,618	1,102	
Shares held in RSU Trust, at cost			
Balance at January 1 and June 30	(21	) (21	)
Treasury stock, at cost			
Balance at January 1	(21,691	) (17,850	6)
Purchase of treasury stock	(4,536	) (3,149	)
Reissuance from treasury stock	1,157	1,608	
Balance at June 30	(25,070		
Total stockholders' equity	\$252,423	\$241,2	205
The Notes to Consolidated Financial Statements (unaudited) are an integral part of these state	monto		

# JPMorgan Chase & Co.

Consolidated statements of cash flows (unaudited)

Consolidated statements of easil flows (unaudited)	
	Six months ended June 30,
(in millions)	2016 2015
Operating activities	
Net income	\$11,720 \$12,204
Adjustments to reconcile net income to net cash provided by operating activities:	
Provision for credit losses	3,226 1,894
Depreciation and amortization	2,625 2,419
Deferred tax expense/(benefit)	577 90
Other	1,001 979
Originations and purchases of loans held-for-sale	(24,963) (30,665)
Proceeds from sales, securitizations and paydowns of loans held-for-sale	22,356 27,797
Net change in:	
Trading assets	(52,501) 34,114
Securities borrowed	(4,505 ) 11,903
Accrued interest and accounts receivable	(18,407) 154
Other assets	(10,764) 718
Trading liabilities	42,738 (16,660)
Accounts payable and other liabilities	3,714 (9,432 )
Other operating adjustments	276 (3,340 )
Net cash provided by/(used in) operating activities	(22,907) 32,175
Investing activities	
Net change in:	
Deposits with banks	(5,580 ) 85,670
Federal funds sold and securities purchased under resale agreements	(24,624) 2,927
Held-to-maturity securities:	
Proceeds from paydowns and maturities	2,718 3,185
Purchases	(134 ) (5,678 )
Available-for-sale securities:	
Proceeds from paydowns and maturities	33,070 43,454
Proceeds from sales	22,559 22,569
Purchases	(42,002) (41,391)
Proceeds from sales and securitizations of loans held-for-investment	5,599 10,217
Other changes in loans, net	(43,094) (45,505)
All other investing activities, net	(576 ) 2,023
Net cash provided by/(used in) investing activities	(52,064) 77,471
Financing activities	
Net change in:	
Deposits	68,209 (88,838)
Federal funds purchased and securities loaned or sold under repurchase agreements	13,346 (11,195)
Commercial paper and other borrowed funds	311 (24,161)
Beneficial interests issued by consolidated variable interest entities	(2,668 ) (1,454 )
Proceeds from long-term borrowings	36,064 54,585
Payments of long-term borrowings	(32,022) (40,190)
Proceeds from issuance of preferred stock	<b>4,774</b>
Treasury stock purchased	(4,536 ) (3,149 )
Dividends paid	(4,120 ) (3,734 )
All other financing activities, net	(425 ) (67 )

Net cash provided by/(used in) financing activities	74,159 (113,429)
Effect of exchange rate changes on cash and due from banks	32 47
Net decrease in cash and due from banks	(780 ) (3,736 )
Cash and due from banks at the beginning of the period	20,490 27,831
Cash and due from banks at the end of the period	\$19,710 \$24,095
Cash interest paid	\$4,283 \$3,302
Cash income taxes paid, net	1,261 5,833

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

See the Glossary of Terms and Acronyms on pages 169-176 for definitions of terms and acronyms used throughout the Notes to Consolidated Financial Statements.

#### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

Note 1 – Basis of presentation

JPMorgan Chase & Co. ("JPMorgan Chase" or "the Firm"), a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the U.S., with operations worldwide. The Firm is a leader in investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. For a discussion of the Firm's business segments, see Note 24.

The accounting and financial reporting policies of JPMorgan Chase and its subsidiaries conform to U.S. GAAP. Additionally, where applicable, the policies conform to the accounting and reporting guidelines prescribed by regulatory authorities.

The unaudited Consolidated Financial Statements prepared in conformity with U.S. GAAP require management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expense, and the disclosures of contingent assets and liabilities. Actual results could be different from these estimates. In the opinion of management, all normal, recurring adjustments have been included for a fair statement of this interim financial information.

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements, and related notes thereto, included in JPMorgan Chase's 2015 Annual Report. Certain amounts reported in prior periods have been reclassified to conform with the current presentation. Consolidation

The Consolidated Financial Statements include the accounts of JPMorgan Chase and other entities in which the Firm has a controlling financial interest. All material intercompany balances and transactions have been eliminated. Assets held for clients in an agency or fiduciary capacity by the Firm are not assets of JPMorgan Chase and are not included on the Consolidated balance sheets.

The Firm determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a VIE.

Effective January 1, 2016, the Firm adopted new accounting guidance related to the consolidation of legal entities such as limited partnerships, limited liability corporations, and securitization structures. The guidance eliminated the deferral issued by the Financial Accounting Standards Board in February 2010 of the accounting guidance for VIEs for certain investment funds, including mutual funds, private equity funds and hedge funds. In

addition, the guidance amends the evaluation of fees paid to a decision-maker or a service provider, and exempts certain money market funds from consolidation. Furthermore, asset management funds structured as limited partnerships or certain limited liability companies are now evaluated for consolidation as voting interest entities if the non-managing partners or members have the ability to remove the Firm as the general partner or managing member without cause (i.e., kick-out rights) based on a simple majority vote. Accordingly, the Firm does not consolidate these voting interest entities. However, in the limited cases where the non-managing partners or members do not have substantive kick-out or participating rights, the Firm evaluates the funds as VIEs and consolidates if it is the general partner or managing member and has a potentially significant variable interest. There was no material impact on the Firm's Consolidated Financial Statements upon adoption of this accounting guidance.

For a further description of JPMorgan Chase's accounting policies regarding consolidation, see Notes 1 and 16 of JPMorgan Chase's 2015 Annual Report.

Offsetting assets and liabilities

U.S. GAAP permits entities to present derivative receivables and derivative payables with the same counterparty and the related cash collateral receivables and payables on a net basis on the Consolidated balance sheets when a legally enforceable master netting agreement exists. U.S. GAAP also permits securities sold and purchased under repurchase agreements to be presented net when specified conditions are met, including the existence of a legally enforceable

master netting agreement. The Firm has elected to net such balances when the specified conditions are met. For further information on offsetting assets and liabilities, see Note 1 of JPMorgan Chase's 2015 Annual Report.

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Note 2 – Business changes
Increase in common stock dividend
The Board of Directors increased the Firm's quarterly
common stock dividend from \$0.44 per share to \$0.48 per
share, effective with the dividend paid on July 31, 2016, to stockholders of record at the close of business on July 6,
2016.

#### Note 3 – Fair value measurement

For a discussion of the Firm's valuation methodologies for assets, liabilities and lending-related commitments measured at fair value and the fair value hierarchy, see Note 3 of JPMorgan Chase's 2015 Annual Report.

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The following table presents the asset and liabilities reported at fair value as of June 30, 2016, and December 31, 2015, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

Assets and liabilities measured at fair value on a recurring bas					
	Fair valu	e hierarchy	Derivative		
June 30, 2016 (in millions)	Level 1	Level 2	Level 3	netting adjustments	Total fair value
Federal funds sold and securities purchased under resale agreements	\$—	\$23,349	\$—	<b>\$</b> —	\$23,349
Securities borrowed	_		_		
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies <sup>(a)</sup>	3	37,305	473		37,781
Residential – nonagency	_	981	200		1,181
Commercial – nonagency		1,580	30		1,610
Total mortgage-backed securities	3	39,866	703		40,572
U.S. Treasury and government agencies <sup>(a)</sup>	20,913	5,525	—	_	26,438
Obligations of U.S. states and municipalities	_	8,653	551	_	9,204
Certificates of deposit, bankers' acceptances and commercial	_	925	_		925
paper					
Non-U.S. government debt securities	32,159	30,241	37		62,437
Corporate debt securities	_	24,873	516		25,389
Loans <sup>(b)</sup>	_	25,570	6,016		31,586
Asset-backed securities	_	2,739	959	_	3,698
Total debt instruments	53,075	138,392	8,782	_	200,249
Equity securities	87,145	474	246		87,865
Physical commodities <sup>(c)</sup>	2,640	1,812			4,452
Other (d)		9,050	670		9,720
Total debt and equity instruments <sup>(d)</sup>	142,860	149,728	9,698		302,286
Derivative receivables:	500	007.701	2 000	(902.242	\27.005
Interest rate	508	927,721	2,899	(893,243	)37,885
Credit	1 447	38,450	1,639	(38,295	)1,794
Foreign exchange	1,447	227,981	1,465	(206,810	)24,083
Equity	— 161	37,924	1,090	(31,887	)7,127
Commodity Total derivative receivables <sup>(e)</sup>	2,116	21,395	236 7,329		)7,557
Total trading assets <sup>(f)</sup>		1,253,471		(1,184,470 (1,184,470	
Available-for-sale securities:	144,970	1,403,199	17,027	(1,104,470	)360,732
Mortgage-backed securities:					
U.S. government agencies <sup>(a)</sup>		56,181			56,181
Residential – nonagency		21,494	1		21,495
Commercial – nonagency		14,948	_		14,948
Total mortgage-backed securities	_	92,623	1		92,624
U.S. Treasury and government agencies <sup>(a)</sup>	14,791	33	_		14,824
Obligations of U.S. states and municipalities		32,108			32,108
Certificates of deposit		106	_		106
Non-U.S. government debt securities	24,362	12,706		_	37,068
Corporate debt securities	_ ·,	6,461	_		6,461
Asset-backed securities:		-, <del>-</del> =			-, -=
Collateralized loan obligations	_	30,506	760		31,266
		*			*

Other		8,347	49		8,396
Equity securities	1,946		_		1,946
Total available-for-sale securities	41,099	182,890	810		224,799
Loans	_	1,067	785	_	1,852
Mortgage servicing rights			5,072		5,072
Other assets:					
Private equity investments <sup>(g)</sup>	81		1,656		1,737
All other	3,910		713		4,623
Total other assets <sup>(f)</sup>	3,991		2,369	_	6,360
Total assets measured at fair value on a recurring basis	\$190,060	6\$1,610,505	\$26,063	\$(1,184,470	)\$642,164
Deposits	<b>\$</b> —	\$9,883	\$2,409	\$	\$12,292
Federal funds purchased and securities loaned or sold under		1,722			1,722
repurchase agreements	<del></del>	1,722	_		1,722
Other borrowed funds		8,962	907		9,869
Trading liabilities:					
Debt and equity instruments <sup>(d)</sup>	80,400	20,737	57		101,194
Derivative payables:					
Interest rate	702	884,633	1,792	(872,050	)15,077
Credit		38,298	1,360	(37,935	)1,723
Foreign exchange	1,349	227,535	2,670	(208,331	)23,223
Equity		37,720	2,982	(32,475	)8,227
Commodity	184	22,081	955	(13,706	)9,514
Total derivative payables <sup>(e)</sup>	2,235	1,210,267	9,759	(1,164,497	)57,764
Total trading liabilities	82,635	1,231,004	9,816	(1,164,497	) 158,958
Accounts payable and other liabilities	4,562		15		4,577
Beneficial interests issued by consolidated VIEs		2	584		586
Long-term debt		23,339	13,147		36,486
Total liabilities measured at fair value on a recurring basis	\$87,197	\$1,274,912	\$26,878	\$(1,164,497	7)\$224,490

	Fair valu	e hierarchy		Derivative	
December 31, 2015 (in millions)	Level 1	Level 2	Level 3	netting adjustments	Total fair value
Federal funds sold and securities purchased under resale	<b>\$</b> —	\$23,141	\$—	\$ <u></u>	\$23,141
agreements	T		*	•	
Securities borrowed	_	395	_	_	395
Trading assets:					
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies <sup>(a)</sup>	6	31,815	715	_	32,536
Residential – nonagency		1,299	194	_	1,493
Commercial – nonagency	_	1,080	115	_	1,195
Total mortgage-backed securities	6	34,194	1,024		35,224
U.S. Treasury and government agencies <sup>(a)</sup>	12,036	6,985			19,021
Obligations of U.S. states and municipalities		6,986	651	_	7,637
Certificates of deposit, bankers' acceptances and commercial		1.042			1.042
paper	_	1,042		_	1,042
Non-U.S. government debt securities	27,974	25,064	74	_	53,112
Corporate debt securities		22,807	736	_	23,543
Loans(b)		22,211	6,604		28,815
Asset-backed securities	_	2,392	1,832	_	4,224
Total debt instruments	40,016	121,681	10,921	_	172,618
Equity securities	94,059	606	265	_	94,930
Physical commodities <sup>(c)</sup>	3,593	1,064	_		4,657
Other		11,152	744	_	11,896
Total debt and equity instruments <sup>(d)</sup>	137,668	134,503	11,930		284,101
Derivative receivables:	,	- ,	,		, ,
Interest rate	354	666,491	2,766	(643,248)	26,363
Credit	_	48,850	2,618		1,423
Foreign exchange	734	177,525	1,616		17,177
Equity	_	35,150	709		5,529
Commodity	108	24,720	237		9,185
Total derivative receivables <sup>(e)</sup>	1,196	952,736	7,946		59,677
Total trading assets <sup>(f)</sup>				(902,201)	
Available-for-sale securities:	150,001	1,007,237	17,070	()02,201	313,770
Mortgage-backed securities:					
U.S. government agencies <sup>(a)</sup>		55,066			55,066
Residential – nonagency		27,618	1		27,619
Commercial – nonagency		22,897	_		22,897
Total mortgage-backed securities		105,581	1		105,582
U.S. Treasury and government agencies <sup>(a)</sup>	10,998	38			11,036
Obligations of U.S. states and municipalities		33,550			33,550
Certificates of deposit		283			283
Non-U.S. government debt securities	23,199	13,477		_	36,676
Corporate debt securities	23,199	12,436		_	12,436
Asset-backed securities:		12,430	<del></del>		12,430
		30 249	759		31.007
Collateralized loan obligations Other	_	30,248		_	31,007
	2.097	9,033	64	_	9,097
Equity securities  Total available for sale securities	2,087	— 204 646	924	_	2,087
Total available-for-sale securities	36,284	204,646	824	_	241,754

Loans	_	1,343	1,518		2,861
Mortgage servicing rights		_	6,608		6,608
Other assets:					
Private equity investments <sup>(g)</sup>	102	101	1,657	_	1,860
All other	3,815	28	744	_	4,587
Total other assets <sup>(f)</sup>	3,917	129	2,401		6,447
Total assets measured at fair value on a recurring basis	\$179,06	5\$1,316,89	3\$31,22	7\$(902,201)	\$624,984
Deposits	<b>\$</b> —	\$9,566	\$2,950	\$—	\$12,516
Federal funds purchased and securities loaned or sold under		3,526			3,526
repurchase agreements					
Other borrowed funds	_	9,272	639	_	9,911
Trading liabilities:					
Debt and equity instruments <sup>(d)</sup>	53,845	20,199	63	_	74,107
Derivative payables:					
Interest rate	216	633,060	1,890	(624,945	10,221
Credit		48,460	2,069	(48,988	1,541
Foreign exchange	669	187,890	2,341	(171,131	19,769
Equity		36,440	2,223	(29,480	9,183
Commodity	52	26,430	1,172	(15,578	12,076
Total derivative payables <sup>(e)</sup>	937	932,280	9,695	(890,122	52,790
Total trading liabilities	54,782	952,479	9,758	(890,122	126,897
Accounts payable and other liabilities	4,382	_	19		4,401
Beneficial interests issued by consolidated VIEs		238	549		787
Long-term debt	_	21,452	11,613		33,065
Total liabilities measured at fair value on a recurring basis	\$59,164	\$996,533	\$25,52	8\$(890,122)	\$191,103

At June 30, 2016, and December 31, 2015, included total U.S. government-sponsored enterprise obligations of \$68.3 billion and \$67.0 billion, respectively, which were predominantly mortgage-related.

At June 30, 2016, and December 31, 2015, included within trading loans were \$14.9 billion and \$11.8 billion, respectively, of residential first-lien mortgages, and \$4.2 billion and \$4.3 billion, respectively, of commercial

(b) first-lien mortgages. Residential mortgage loans include conforming mortgage loans originated with the intent to sell to U.S. government agencies of \$8.6 billion and \$5.3 billion, respectively, and reverse mortgages of \$2.2 billion and \$2.5 billion, respectively.

Physical commodities inventories are generally accounted for at the lower of cost or market. "Market" is a term defined in U.S. GAAP as not exceeding fair value less costs to sell ("transaction costs"). Transaction costs for the Firm's physical commodities inventories are either not applicable or immaterial to the value of the inventory. Therefore, market approximates fair value for

the Firm's physical commodities inventories. When fair value hedging has been applied (or when market is below cost), the carrying value of physical commodities approximates fair value, because under fair value hedge accounting, the cost basis is adjusted for changes in fair value. For a further discussion of the Firm's hedge accounting relationships, see Note 5. To provide consistent fair value disclosure information, all physical commodities inventories have been included in each period presented.

- (d) Balances reflect the reduction of securities owned (long positions) by the amount of identical securities sold but not yet purchased (short positions).
  - As permitted under U.S. GAAP, the Firm has elected to net derivative receivables and derivative payables and the related cash collateral received and paid when a legally enforceable master netting agreement exists. For purposes of the tables above, the Firm does not reduce derivative receivables and derivative payables balances for this
- (e) netting adjustment, either within or across the levels of the fair value hierarchy, as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset or liability. However, if the Firm were to net such balances within level 3, the reduction in the level 3 derivative receivables and payables balances would be \$1.6 billion and \$546 million at June 30, 2016, and December 31, 2015, respectively; this is exclusive of the netting benefit associated with cash collateral, which would further reduce the level 3 balances.
  - Certain investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not required to be classified in the fair value hierarchy. At June 30, 2016, and
- December 31, 2015, the fair values of these investments, which include certain hedge funds, private equity funds, real estate and other funds, were \$1.0 billion and \$1.2 billion, respectively. Included in the balances at June 30, 2016, and December 31, 2015, were trading assets of \$61 million and \$61 million, respectively, and other assets of \$949 million and \$1.2 billion, respectively.

Private equity instruments represent investments within Corporate. The portion of the private equity investment (g) portfolio carried at fair value on a recurring basis had a cost basis of \$2.8 billion and \$3.5 billion at June 30, 2016, and December 31, 2015, respectively.

Transfers between levels for instruments carried at fair value on a recurring basis

For the three and six months ended June 30, 2016 and 2015, there were no individually significant transfers between levels 1 and 2, or from level 2 into level 3. In addition, during the three and six months ended June 30, 2016, there were no individually significant transfers from level 3 to level 2.

During the three and six months ended June 30, 2015, transfers from level 3 into level 2 included \$1.9 billion and \$2.0 billion, respectively, of corporate debt driven by a reduction of the significance in the unobservable inputs and an increase in observability for certain structured products, and \$1.3 billion and \$1.9 billion of trading loans, respectively, driven by an increase in observability of certain collateralized financing transactions.

All transfers are assumed to occur at the beginning of the quarterly reporting period in which they occur.

Level 3 valuations

For further information on the Firm's valuation process and a detailed discussion of the determination of fair value for individual financial instruments, see Note 3 of JPMorgan Chase's 2015 Annual Report.

The following table presents the Firm's primary level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and, for certain instruments, the weighted averages of such inputs. While the determination to classify an instrument within level 3 is based on the significance of the unobservable inputs to the overall fair value measurement, level 3 financial instruments typically include observable components (that is, components that are actively quoted and can be validated to external sources) in addition to the unobservable components. The level 1 and/or level 2 inputs are not included in the table. In addition, the Firm manages the risk of the observable components of level 3 financial instruments using securities and derivative positions that are classified within levels 1 or 2 of the fair value hierarchy.

The range of values presented in the table is representative of the highest and lowest level input used to value the significant groups of instruments within a product/instrument classification. Where provided, the weighted averages of the input values presented in the table are calculated based on the fair value of the instruments that the input is being used to value.

In the Firm's view, the input range and the weighted average value do not reflect the degree of input uncertainty or an assessment of the reasonableness of the Firm's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Firm and the relative distribution of instruments within the range of characteristics. For example, two option contracts may have similar levels of market risk exposure and valuation uncertainty, but may have significantly different implied volatility levels because the option contracts have different underlyings, tenors, or strike prices. The input range and weighted average values will therefore vary from period to period and parameter-to-parameter based on the characteristics of the instruments held by the Firm at each balance sheet date. For the Firm's derivatives and structured notes positions classified within level 3 at June 30, 2016, interest rate correlation inputs used in estimating fair value were concentrated towards the upper end of the range presented; equities correlation inputs were concentrated at the upper end of the range; the credit correlation inputs were distributed across the range presented; and the foreign exchange correlation inputs were concentrated at the upper end of the range presented. In addition, the interest rate volatility inputs used in estimating fair value were distributed across the range presented. The equity volatilities are concentrated in the lower half end of the range. The forward commodity prices used in estimating the fair value of commodity derivatives were concentrated in the middle of the range presented.

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Level 3 inputs<sup>(a)</sup>

June 30, 2016	(in millions,	except for	ratios and	basis points)	
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June 30, 2010 (in minions, except for factor	Fair	Principal valuation	Unobservable	Range	of innu	ıt Weig	thted
Product/Instrument	value	technique	inputs	values	or mpu	avera	
Residential mortgage-backed securities and	\$4,131	Discounted cash flows	Yield	2%	-16	%5	%
loans			Prepayment speed		-20	%8	%
			Conditional default rate	0%	-25	%2	%
			Loss severity	0%	<del>-9</del> 0	%27	%
Commercial mortgage-backed securities	1,137	Discounted cash flows	Yield	1%	-25	%8	%
and loans(b)			Conditional default rate	0%	-100	%68	%
			Loss severity	40%	375	40	%
Corporate debt securities, obligations of	2,806	Discounted cash flows	Credit spread	40 bps	bps	177	bps
U.S. states and municipalities, and other <sup>(c)</sup>		N. 6 . 1	Yield	3%	-20	%6	%
•	3,019	Market comparables	Price	\$—	-\$340	\$ 90	
Net interest rate derivatives	1,107	Option pricing	Interest rate correlation	(30)%	<del>-9</del> 7	%	
			Interest rate spread volatility	3%	-38	%	
Net credit derivatives(b)(c)	279	Discounted cash flows	Credit correlation	30%	<del>-9</del> 0	%	
Net foreign exchange derivatives	(1,205)	Option pricing	Foreign exchange correlation	(20)%	<b>–</b> 70	%	
Net equity derivatives	(1,892)		Equity volatility	20%	-60	%	
Net commodity derivatives	(719)	Discounted cash flows	Forward commodity price	\$36	-\$55 p	er barre	:1
Collateralized loan obligations	760	Discounted cash flows	Credit spread	406 bps	701 bps	469 t	ops
			Prepayment speed	20%		20	%
			Conditional default rate	2%		2	%
			Loss severity	30%		30	%
	153	Market comparables	Price	\$—	<b>-</b> \$100	\$ 68	
MSRs	5,072	Discounted cash flows	Refer to Note 16				
Private equity investments	1,656	Market comparables	EBITDA multiple	6.9 x	$\frac{10.8}{x}$	8.2 x	-
	15,908	Option pricing	Interest rate correlation	(30)%	<del>-9</del> 7	%	
Long-term debt, other borrowed funds, and deposits <sup>(d)</sup>			Interest rate spread volatility	3 %	-38	%	
1			Foreign exchange correlation	(20)%	<i>–</i> 70	%	
			Equity correlation	(50)%	<i>–</i> 75	%	

	555	Discounted cash flows	Credit correlation	30	%- <del>9</del> 0	%	
Beneficial interests issued by consolidated VIEs <sup>(e)</sup>	584	Discounted Cash Flows	Yield	2%	-8	%4	%
			Prepayment Speed	7%	-8	%7	%
			Conditional default	2%		2	%
			Loss severity	30%	, D	30	%

- (a) The categories presented in the table have been aggregated based upon the product type, which may differ from their classification on the Consolidated balance sheets.
- The unobservable inputs and associated input ranges for approximately \$315 million of credit derivative (b) receivables and \$276 million of credit derivative payables with underlying commercial mortgage risk have been included in the inputs and ranges provided for commercial MBS and loans.
- The unobservable inputs and associated input ranges for approximately \$388 million of credit derivative (c) receivables and \$355 million of credit derivative payables with underlying ABS risk have been included in the inputs and ranges provided for corporate debt securities, obligations of U.S. states and municipalities and other. Long-term debt, other borrowed funds and deposits include structured notes issued by the Firm that are
- (d) predominantly financial instruments containing embedded derivatives. The estimation of the fair value of structured notes is predominantly based on the derivative features embedded within the instruments. The significant unobservable inputs are broadly consistent with those presented for derivative receivables.
- (e) The parameters are related to residential mortgage-backed securities.

Changes in and ranges of unobservable inputs

For a discussion of the impact on fair value of changes in unobservable inputs and the relationships between unobservable inputs as well as a description of attributes of the underlying instruments and external market factors that affect the range of inputs used in the valuation of the Firm's positions see Note 3 of JPMorgan Chase's 2015 Annual Report.

Changes in level 3 recurring fair value measurements

The following tables include a rollforward of the Consolidated balance sheets amounts (including changes in fair value) for financial instruments classified by the Firm within level 3 of the fair value hierarchy for the three and six months ended June 30, 2016 and 2015. When a determination is made to classify a financial instrument within level 3, the determination is based on the significance of the unobservable parameters to the overall fair value measurement. However, level 3 financial

instruments typically include, in addition to the unobservable or level 3 components, observable components (that is, components that are actively quoted and can be validated to external sources); accordingly, the gains and losses in the table below include changes in fair value due in part to observable factors that are part of the valuation methodology. Also, the Firm risk-manages the observable components of level 3 financial instruments using securities and derivative positions that are classified within level 1 or 2 of the fair value hierarchy; as these level 1 and level 2 risk management instruments are not included below, the gains or losses in the following tables do not reflect the effect of the Firm's risk management activities related to such level 3 instruments.

Fair value measurements using significant unobservable inputs

Three months ended June 30, 2016 (in millions)	Fair value at April 1, 2016	Total realiz gains/	ed/unre /(losses	ealized Purch )	a <b>Sed</b> ®	Settlemo	Transfeinto and/or ento of level	ers Fair valu at June 30, 2016	unrea gains erelate to finan	uments at 30,
Assets: Federal funds sold and securities purchased under resale agreements Trading assets: Debt instruments:	\$4	\$ —		\$	<del>\$</del> —	\$ —	\$ (4	) \$—	\$ —	
Mortgage-backed securities:	6 <b></b> 0	<i>(</i> 2.4			( <b>#</b> 0	(2.0	\	=-	<i>-</i>	
U.S. government agencies	650	(24	)	1	(50)	(28	) (76	) 473	(27	)
Residential – nonagency	186	(1	)	143	(14)8	(6	) 26	200	(1	)
Commercial – nonagency	195	(1	)	15 159	(23)	(24	(156	) 30	(2)	)
Total mortgage-backed securities Obligations of U.S. states and	1,031	(26	)	139	(22)1	(34	) (206	) 703	(30	)
municipalities	620	4			(41)	(32	) —	551	4	
Non-U.S. government debt securities	40	(8	)	25	(19)		(1	) 37	(5	)
Corporate debt securities	654	(54	)	80	(89)	(68	) (7	) 516	(50	)
Loans	6,776	(217	)	421	(73)3	(338	) 107	6,016	(234	)
Asset-backed securities	1,190	16		255	(33)4	(42	) (126	) 959	4	
Total debt instruments	10,311	(285	)	940	(1,437	(514	) (233	) 8,782	(311	)
Equity securities	279	(9	)	2	(24)	(3	) 1	246	(6	)
Other	723	(37	)	169	(14)4	(29	) (12	) 670	(36	)
Total trading assets – debt and equi instruments	ty <sub>11,313</sub>	(331	) (c)	1,111	(1,\$05	(546	) (244	) 9,698	(353	) <sup>(c)</sup>
Net derivative receivables: <sup>(a)</sup>										
Interest rate	846	334		62	(12)	(180	) 57	1,107	190	
Credit	402		)	_	(1)	48	32	279	`	)
Foreign exchange	(1,032)			58	(10)3	(158		) (1,205)		
Equity	(2,055)	-	)	72	(21)5	(5	) 323	(1,892)		
Commodity	(952)		(-)		18	(29	) 9	, ,	291	(-)
Total net derivative receivables Available-for-sale securities:	(2,791)	408	(c)	192	(31)3	(324	) 398	(2,430)	489	(c)
Asset-backed securities	809	7				(7	) —	809	7	
Other	1			_				1		
Total available-for-sale securities	810	7	(d)	_	_	(7	) —	810	7	(d)
Loans	1,009	(36	) (c)	184	_	(372	) —	785	(16	) (c)
Mortgage servicing rights Other assets:	5,658	(457	) <sup>(e)</sup>	113	(3)	(239	) —	5,072	(457	) (e)
Private equity investments	1,644	25	(c)	427	(41)1	(29	) —	1,656	(29	) (c)
All other	707	89	(f)	30	(11)	(102	) —	713	82	(f)

Fair value measurements using significant unobservable inputs

Three months ended June 30, 2016 (in millions)	Fair value at April 1, 2016	Total realiz	ed/unro s)/losse	ealized	1			Transfe into and/or entoth of level 3(i)		unrea (gain erelate to finan	acial uments at 30,
Liabilities:(b)	<b></b>	<b>.</b>	(-)		4	<b>.</b>	<b>4.460</b>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<b></b>	<b>.</b> 40	(-)
Deposits	\$2,419	\$ 33	(c)	\$	<del>\$</del> -	\$ 317	\$ (168	) \$ (192 )	\$2,409	\$ 40	(c)
Federal funds purchased and securities loaned or sold under repurchase agreements	6	_				_	(2	) (4	_		
Other borrowed funds	568	(31	) (c)	_	_	515	(170	) 25	907	(12	) <sup>(c)</sup>
Trading liabilities – debt and equity instruments	52	(3	) <sup>(c)</sup>	_	17	_	(12	) 3	57	(1	) <sup>(c)</sup>
Accounts payable and other liabilities	16				_		(1	) —	15	_	
Beneficial interests issued by consolidated VIEs	649	(30	) <sup>(c)</sup>		_		(35	) —	584	(30	) <sup>(c)</sup>
Long-term debt	12,587	(47	) <sup>(c)</sup>		_	2,714	(1,498	) (609	13,147	186	(c)
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Fair value measurements using significant unobservable inputs

	Tall Va	iue ilieasui	CITIC	ins using	sigiiii	icani un	oosei vat	ле	mputs		~-	
Three months ended June 30, 2015 (in millions)	Fair value a Apr 1, 2015	raalizad/unraalizad							Transfinto and/or and/or level 3(i)	Fair value a	alue at related une 30,to financial	
Assets:											,	
Trading assets:												
Debt instruments:												
Mortgage-backed securities:												
U.S. government agencies	\$888	\$ 91		\$ 108	\$(14	8)	\$ (34	)	\$ (4	)\$901	\$84	
Residential – nonagency	449	54		25	(116	•	(4	)		) 123	28	
Commercial – nonagency	211	2		98		)	(6	)	(118	) 138	(2	)
Total mortgage-backed	211	2		70	(ד)	,	(0		•	) 130	(2	,
securities	1,548	147		231	(313	)	(44	)	(407	) 1,162	110	
Obligations of U.S. states and												
municipalities	1,331	3		47	(39	)	(2	)	(93	) 1,247	3	
Non-U.S. government debt												
securities	180	8		54	(20	)	(11	)	(3	) 208	16	
Corporate debt securities	2,759	5		288	(313	`	57		(1,853	) 0.42	10	
Loans	10,763				•		(350	`	-	-	264	
Asset-backed securities	-	294		1,160 737	(1,15)	-			-	)9,563	15	
	1,233				(371	-	(26	-	(55	)1,539		
Total debt instruments	17,814			2,517	(2,20		(376		-	) 14,662		
Equity securities	317	8		21	(13	)	(14	)	(9	)310	9	`
Other	1,041	80		450	(451	)	(137	)	(14	)969	(3	)
Total trading assets – debt and equity instruments	19,172	566	(c)	2,988	(2,67	2)	(527	)	(3,586	) 15,941	424	(c)
Net derivative receivables: <sup>(a)</sup>												
Interest rate	650	351		133	(84	)	(98	)	(93	) 859	309	
Credit	275	17		1	(1	)	107		33	432	22	
Foreign exchange	707	118		8	(8	)	(187	)	(	) 405	245	
Equity	(2,745			216	(383	)	93		170	(1,848		
Commodity	(735	/			—		47		(35	/ \	)180	
Total net derivative receivables	(1,848	)1,416	(c)	358	(476	)	(38	)	(158	) (746	)1,377	(c)
Available-for-sale securities:												
Asset-backed securities	881	2		_	_		(21	)	_	862	2	
Other	122	_			—		(10	)	(99	) 13	_	
Total available-for-sale	1,003	2	(d)				(31	`	(99	)875	2	(d)
securities	1,003		` /		_		(31	,		)013	2	
Loans	2,222	85	(c)	297			(309	)		2,295	83	(c)
Mortgage servicing rights	6,641	794	(e)	583	(218	)	(229	)		7,571	794	(e)
Other assets:												
Private equity investments(j)	2,073	11	(c)	7	(27	)	(54	)	(23	) 1,987	(14	) (c)
All other <sup>(j)</sup>	890	12	(f)	11	(57	)	(17	)		839	3	(f)

Fair value measurements using significant unobservable inputs

Three months ended	Fair	Total		Purchas	se <b>S</b> ales	Issuan	c <b>S</b> ettlem	nen	t¶†ànsf	er <b>F</b> air	Change in
June 30, 2015	value a	t realized/	unrea/	lized					into	value at	unrealized
(in millions)	Apr 1,	(gains)/l	osses						and/or	June 30	,(gains)/losses
	2015								out of	2015	related
									level		to financial
									3 <sup>(i)</sup>		instruments
											held at June
											30, 2015
Liabilities:(b)											
Deposits	\$3,340	\$ (156	) (c)	\$ —	<b>\$</b> —	\$ 673	\$ (30	)	\$(299	)\$3,528	\$ (139 ) <sup>(c)</sup>
Other borrowed funds <sup>(j)</sup>	1,116	(4	) (c)			1,274	(1,161	)	36	1,261	